ENVIRONMENTAL RESTORATION PROGRAM

FINAL
REMEDIAL ACTION COMPLETION REPORT
ERP SITE NO. 2

157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
MISSOURI AIR NATIONAL GUARD
ST. LOUIS, MISSOURI

Prepared For:

ANG/A7CVR
Andrews AFB, Maryland

July 2006

ENVIRONMENTAL RESTORATION PROGRAM

FINAL
REMEDIAL ACTION COMPLETION REPORT
ERP SITE NO. 2

157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
MISSOURI AIR NATIONAL GUARD
ST. LOUIS, MISSOURI

Contract No. DAHA92-01-D0007
Delivery Order No. 66
MWH File No. 2090955

Prepared For:

ANG/A7CVR
Andrews AFB, Maryland

Prepared By:

MWH Americas, Inc.

July 2006

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.

JEFFREY L. COON, P.E.	E-27366	7/11/06
	REG. NO	DATE

MY REGISTRATION EXPIRES DECEMBER 31, 2006.

TABLE OF CONTENTS

PAGE

LIST OF TABLES

TABLE OF CONTENTS

PAGE

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
AOG	Air Operations Group
ANG	Air National Guard
ARNG	Army National Guard
AST	aboveground storage tank
bcy	bulk cubic yards
bgs	below ground surface
CALM	Cleanup Levels for Missouri
A7CVR	Civil and Environmental Restoration
C_{IDI}	ingestion/dermal contact/inhalation pathway concentration
C_{LEACH}	leaching-to-groundwater pathway concentration
COCs	constituents of concern
DP	direct push
ERP	Environmental Restoration Program
GTARC	Groundwater Target Concentration
IDOT	Illinois Department of Transportation
IDW	investigation-derived waste
IRP	Installation Restoration Program
MDNR	Missouri Department of Natural Resources
MDOT	Missouri Department of Transportation
mg/kg	milligrams per kilogram
MOANG	Missouri Air National Guard
MS/MSD	matrix spike/matrix spike duplicate
MWH	MWH Americas, Inc.
OpTech	Operational Technologies Corporation
PA	Preliminary Assessment
PA/SI	preliminary assessment/site investigation
PID	photoionization detector

LIST OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

ppm	parts per million
QC	quality control
RA	Remedial Action
RI	remedial investigation
SI	site investigation
Site 2	ERP Site No. 2
STARC	Soil Target Concentration
Station	Jefferson Barracks Air National Guard Station
SVOCs	semivolatile organic compounds
TEH	total extractable hydrocarbons
TPH	total petroleum hydrocarbons
US	United States
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds

1.0 INTRODUCTION

MWH Americas, Inc. (MWH) was contracted by the Air National Guard/Civil and Environmental Restoration (ANG/A7CVR) to perform Remedial Action (RA) at Environmental Restoration Program (ERP) Site No. 2 (Site 2) at the Missouri Air National Guard (MOANG) 157th Air Operations Group (AOG) at the Jefferson Barracks ANG Station (Station) in St. Louis, Missouri. This work was performed under Contract No. DAHA92-01-D-0007, Delivery Order No. 0066.

1.1 PURPOSE AND SCOPE

This document serves as the RA Completion Report for activities at Site 2 (RA Report), formerly designated as Area of Concern (AOC) B. These activities were selected based on information contained in the *Final ERP Site No. 2, Remedial Investigation Report,* dated October 2004 (*RI Report*) (MWH, 2004). The purpose of the activities described in this RA Report was to remove and dispose of contaminated soil at Site 2, as outlined in the *Final Removal Action Work Plan, ERP Site No. 2*, dated October 2005 (*RA Work Plan*) (MWH, 2005b). The scope of work implemented included the removal and disposal of approximately 143 bulk cubic yards (bcy) of soil, including confirmation soil sampling, backfill, and site restoration.

1.2 PROJECT APPROACH

In 2003, organic constituents were detected in soil at Site 2 at concentrations greater than the Missouri Department of Natural Resources (MDNR) soil target concentrations (STARCs) presented in *Cleanup Levels for Missouri (CALM), Appendix B, Tier 1 Soil and Groundwater Cleanup Standards* (MDNR, 2001). These detections included total petroleum hydrocarbons (TPH), and the following semivolatile organic compounds (SVOCs): benzo(a)anthracene, benzo(a)pyrene, benzo(a)fluoranthene. Arsenic was the only inorganic constituent detected at concentrations greater than the MDNR STARCs; however, detected concentrations were consistent with regional and site-specific background levels (MWH, 2004). Therefore, arsenic is not considered a constituent of concern (COC) in Site 2 soils.

The remedial investigation (RI) groundwater sampling activities, conducted over two rounds, in 2003 indicated no chemical constituents above MDNR CALM Groundwater Target Concentrations (GTARCs). No previous groundwater sampling had been conducted at Site 2.

As provided in the *Draft Further Action Decision Document* (MWH, 2005a), the selected alternative to address soil impacts at Site 2 was "Excavation with Landfill Disposal." On November 29, 2005, in accordance with the *Final RA Work Plan,* the contaminated soil was excavated and transported to an off-site, certified landfill for disposal. On December 2, 2005, the excavation was backfilled with clean fill material. Completed field activities and methods are further discussed in Section 3.0 of this RA Report.

1.3 REPORT ORGANIZATION

The sections of this RA Report are listed below:

- Section 1.0 – Introduction
- Section 2.0 – Site Description
- Section 3.0 – Remedial Action Activities
- Section 4.0 – References

Appendix A contains a copy of the Landfill Subtitle D Certification, waste disposal log, and waste manifests for the soil removed from Site 2. Appendix B contains the analytical reports of the soil samples. Appendix C contains a photographic record of the excavation activities. Appendix D contains the drilling logs. Appendix E contains the data validation reports.

2.0 SITE DESCRIPTION

This section provides background information for the Station and Site 2, including location, adjacent land use, Station history, and previous and recent investigations conducted. The contents of this section are taken primarily from the *Installation Restoration Program (IRP) Preliminary Assessment/Site Investigation (PA/SI) Report* dated March 1997 prepared by Operational Technologies Corporation (OpTech) of San Antonio, Texas (OpTech, 1997), and the RI Report (MWH, 2004).

2.1 STATION LOCATION

The Station is located in eastern Missouri, near the confluence of the Missouri and Mississippi Rivers. As shown in Figure 1, the Station lies on the west bank of the Mississippi River, approximately 10 miles south of the City of St. Louis, in St. Louis County, Missouri. The Station occupies approximately 135 acres and is bordered on the east by the Mississippi River. The main entrance is currently through the north gate.

2.2 STATION HISTORY

The Station is currently home to several ANG units, including Headquarters for the 157th AOG, 218th Engineering Installation Squadron, 121st Air Control Squadron, and a Civil Engineering detachment. Also located at the Station are several Army National Guard (ARNG) units, components of the United States (U.S.) Army Reserve, National Guard Bureau Human Resources (eastern division), Defense Fuels Supply, and the U.S. Coast Guard. A full-time work force of approximately 140 people supports the Station's total unit training assembly population of over 2,000 military personnel.

On July 10, 1826, troops of the U.S. First Infantry Regiment encamped at the Site later known as Jefferson Barracks. The military reservation of Jefferson Barracks was established on the eastern edge of the vast expanse of wilderness acquired by the United States under the Louisiana Purchase. At the beginning, Jefferson Barracks was the largest military reservation in the country, covering over 1,700 acres and stretching 2 miles along the west bank of the Mississippi River. Jefferson Barracks was the first basic training camp of the U.S. Army and home to the First U.S. Cavalry. Throughout its history, Jefferson Barracks has served as a U.S. Ordnance

Depot, U.S. Army Engineers Depot, the largest U.S. Army General Hospital, a U.S. Naval Munitions Storage Depot, an Introduction and Separation Center, a National Guard Mobilization Headquarters, an Army Air Corps School, and a training base. During the 1800s, Jefferson Barracks used mainly stone or wooden buildings. An extensive rebuilding program took place between 1890 and 1905, replacing the original stone and wooden buildings with red brick structures, which are still in use today. During World War I, Jefferson Barracks was designated as a clearing house for recruits. With the advent of World War II, there was a large increase in the population of Jefferson Barracks. Numerous temporary facilities and temporary wooden buildings were constructed to accommodate the sudden increase in population.

On June 30, 1946, Jefferson Barracks was deemed unfavorable for use as a training site for a large, modern army, and the Station was declared surplus and erased from the muster roles as an active post. Elements of the Missouri National Guard then moved onto the Station. On June 8, 1950, a tract of land containing 135 acres was transferred to the State of Missouri for use in training and maintaining reserve (National Guard) components of the armed forces. Hence, the former 1,700 acres of military reservation was reduced to 135 acres. In 1952, Missouri Guard units at Jefferson Barracks included the ANG's 157th Tactical Control Group, 181st Tactical Control Squadron, two Ground Electronic Engineering Installation Agency Squadrons, and ARNG Organizational Maintenance companies, which provided vehicle maintenance to ARNG units in the St. Louis area. By 1970, most ARNG units in the St. Louis area had moved to Jefferson Barracks, and most of the maintenance activities at Jefferson Barracks were related to vehicle maintenance support or ARNG combat units.

In order for the U.S. Air Force to provide funding for the construction and maintenance of facilities used by the ANG at Jefferson Barracks, they required the property be leased back to the Federal Government for a term of at least 20 years. This lease was signed in 1970 and is effective until the year 2023. Since the lease was signed, the ANG has upgraded many of the 1890- to 1905-era buildings (red brick) to modern-day standards, while preserving their historical architectural features. The temporary wooden buildings from the World War II era have been demolished with the exception of one building, which has been upgraded and is currently in use as a carpenter shop for the ANG Civil Engineers. Some buildings under ARNG control have

Drawn By & Date: cak 7/13/05 | Approved By & Date: | Revised By & Date: | 01/10/06 | Approved By & Date:

north

0 2000

APPROXIMATE SCALE IN FEET

MAP SOURCE:
USGS TOPOGRAPHIC QUADRANGLES
OAKVILLE, MISSOURI-ILLINOIS
WEBSTER GROVES, MISSOURI-ILLINOIS

157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI

157TH AIR OPERATIONS GROUP LOCATION

FIGURE 1

MWH

P:\CAD\Saved\AIR\St. Louis\jb files\Fig 01.dwg dav/10/05

been improved, but most have not been maintained due to lack of funding. ANG units assigned to Jefferson Barracks provide radar support to both active and reserve organizations. ARNG units provide combat engineers, military police, and transportation and vehicle maintenance support. The size of the full-time work force, Air Force and Army technicians, active duty personnel, and Missouri State employees gives the Station the appearance of an active duty facility.

2.3 PREVIOUS INVESTIGATION ACTIVITIES

The ANG Readiness Center/Installation Restoration Branch authorized OpTech to conduct a PA/SI at the Station. The Preliminary Assessment (PA) of the 157th AOG was initiated by the ANG Readiness Center and OpTech personnel in November 1993. The PA consisted of interviews with personnel who were stationed at Jefferson Barracks at the time of the interview, or who were retired or currently assigned to other military installations. The individuals interviewed were knowledgeable of current and former waste disposal practices conducted at the Station. The PA also included a review of Station records and field observations.

The PA process revealed four AOCs at the Station, based on historical use of hazardous materials and hazardous wastes; one of the AOCs was designated AOC-B, a storage area south of Building 51, now known as Site 2 (Figure 2). The four AOCs (AOC-A through AOC-D) were further investigated by OpTech during the site investigation (SI) phase of their investigation to determine whether contamination was present at each AOC and, if so, whether concentrations were sufficient to warrant further investigation as an ERP site. The SI phase was conducted from December 5 through 15, 1994 and consisted of the following components:

- A geophysical survey was conducted at AOC-A and AOC-D to provide information on possible buried sources, and to verify no subsurface structures or hazards to drilling were present, based on historical information obtained during the PA.
- A soil vapor survey was conducted at the four AOCs to delineate the extent of benzene, toluene, ethylbenzene, total xylenes, and TPH; the results of which were used to develop the optimum locations of borings.

- Soil borings were drilled at the four AOCs to confirm and delineate chemical constituents in soil.

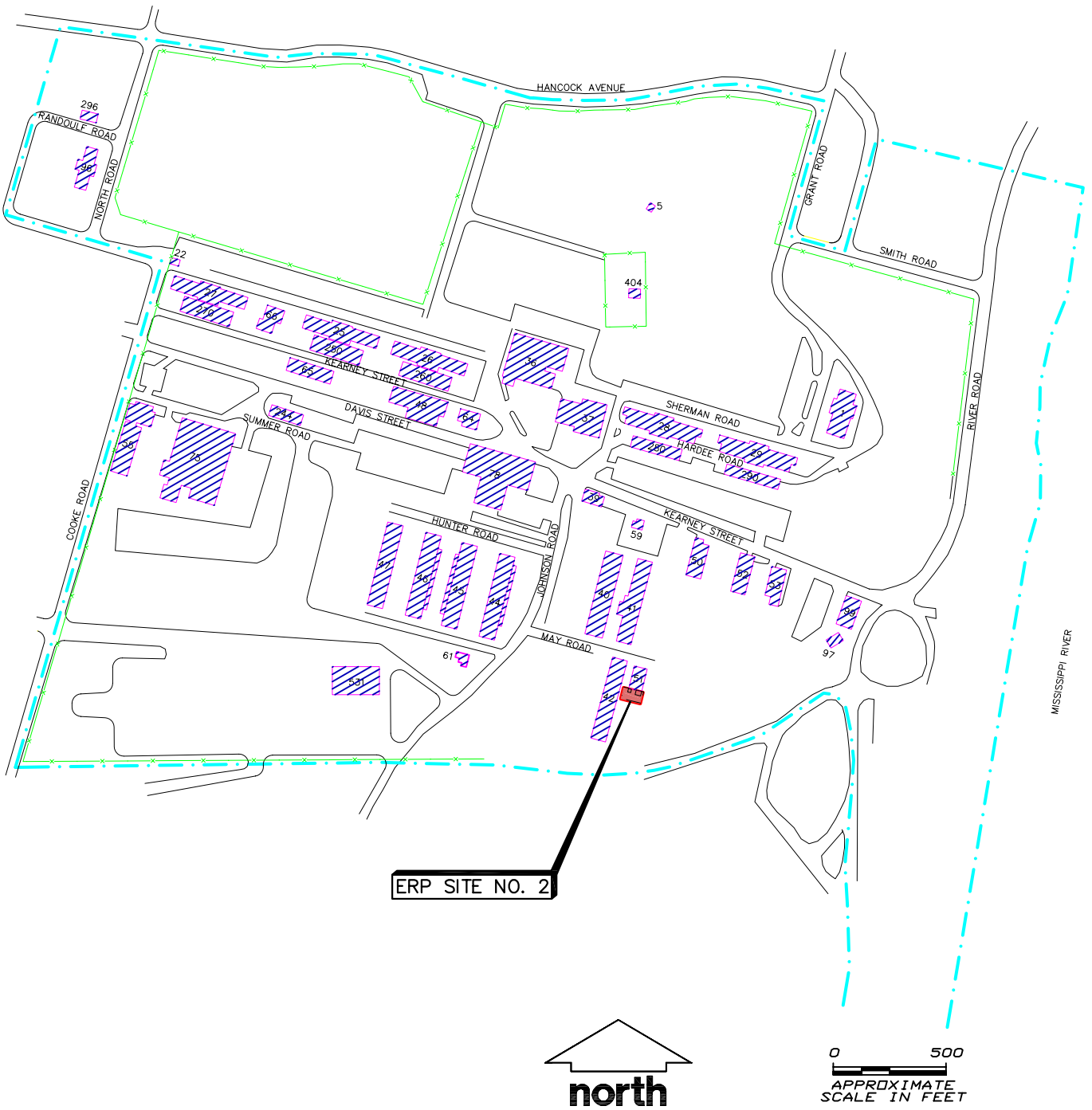
Fourteen soil borings were drilled at the AOCs to obtain soil samples for field screening, subsurface geological characterization, and laboratory analyses. A total of 37 soil samples and 3 surface sediment samples were submitted for AOC-specific analyses, which included testing for volatile organic compounds (VOCs), SVOCs, TPH, and total metals. The soil samples were field-screened using a photoionization detector (PID) and a field gas chromatograph, then subsequently analyzed for the laboratory parameters related to the potential COCs identified in the PA. The historical analyte detections in soil from the 1994 SI are included as Appendix A of the RI Report (MWH, 2004).

Piezometer installation was planned as part of the SI activities to determine groundwater flow direction in the vicinity of the AOCs; however, since groundwater was not encountered above bedrock in the majority of borings, and under the direction of the ANG, piezometers were not installed in the soil borings.

AOC-A, AOC-C, and AOC-D, designated by OpTech during the PA/SI, received a No Further Response Action Planned designation from the MDNR in a letter dated May 28, 2003 and were, therefore, not addressed further in the RI Report.

In September 2003, MWH finalized the *ERP Site No. 2 Remedial Investigation Work Plan* describing procedures of the additional investigation sampling and analysis activities at Site 2. The technical approach was to use data gathered during previous investigations to streamline and focus the RI field data collection activities. The purpose of the RI investigative was to verify the soil and groundwater conditions noted during the SI; to provide the additional information necessary to delineate the areal extent, depth, and concentration of constituents present in soil and groundwater; and to determine the apparent direction of groundwater flow beneath Site 2. The proposed RI activities included the advancement of eight soil probe holes to collect near-surface soil samples; the drilling of soil borings to facilitate installation of four groundwater monitoring wells (MW-1, MW-2, MW-3, and MW-4); and two separate rounds of groundwater

Drawn By & Date: cek 7/13/05 | Approved By & Date: | Revised By & Date: 01/10/06 | Approved By & Date:



LEGEND:

BUILDING

FENCE

PROPERTY BOUNDARY

SOURCE: IRP PA/SI REPORT FOR JEFFERSON BARRACKS ANG STATION BY OPTECH CORP., MARCH 1997.

157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI

ERP SITE NO. 2 LOCATION

FIGURE 2

MWH

P:\CAD\Guard\AIR\St. Louis\zip files\Fig 02.dwg Jan/10/06

monitoring at the newly-installed wells. The RI fieldwork was conducted during October and December 2003.

Results of the previous investigations are presented in the RI Report (MWH, 2004) and are summarized in Section 2.5 of this RA Report.

2.4 SITE 2 DESCRIPTION AND HISTORY

Based on the PA conducted in 1993 and 1994, Building 51 was constructed in the late 1960s. It was used for vehicle maintenance on a full-time basis until 1975. Building 51 had two maintenance bays where two to four vehicles were serviced weekly. The used oil generated by vehicle maintenance activities at Building 51 was disposed east of Building 42 and south of Building 51 during the 1960s and 1970s. The PA determined the AOC at Building 51 to be an approximate 40- by 60-foot area adjacent to the building on the south side, surfaced by grass, gravel, and a small concrete pad (Figure 3). This area is currently used to store grounds maintenance vehicles and equipment, and other miscellaneous nonhazardous materials. A small storage building/shed is situated on a 10- by 10-foot concrete pad, adjacent to the southwest corner of Building 51; and a 17- by 21-foot concrete tank dike, constructed in 1991, is situated adjacent to the southeast corner of Building 51.

A 3,000-gallon aboveground storage tank (AST) was used to store waste motor oil in the southwestern portion of the storage area; the AST was removed, and no physical evidence of its previous location remains. The AST replaced 55-gallon drums that had previously been used for storage of the used oil. It is estimated the AST was present from the early 1970s until the late 1980s and was used to store waste motor oil from ARNG maintenance facilities. Other materials such as hydraulic fluid, new motor oil, and cleaning compounds were stored in 55-gallon drums on gravel within the storage area. The gravel was periodically replaced because of staining from spilled materials. No records documenting the disposition of the replaced gravel were found during the OpTech PA/SI work.

During the SI, eleven soil vapor survey points (labeled 10 through 20; Figure 3) were advanced at Site 2 to screen for chemical constituents associated with possible spillage from used oil and solvent storage. Four soil borings (labeled B-001BH through B-004BH; Figure 3) were

advanced at Site 2, and three soil samples were collected from each boring for laboratory analysis. Each soil sample was analyzed for VOCs, SVOCs, TPH, and metals. TPH, benzo(a)pyrene, and beryllium were detected in soil at concentrations greater than the current MDNR STARCs.

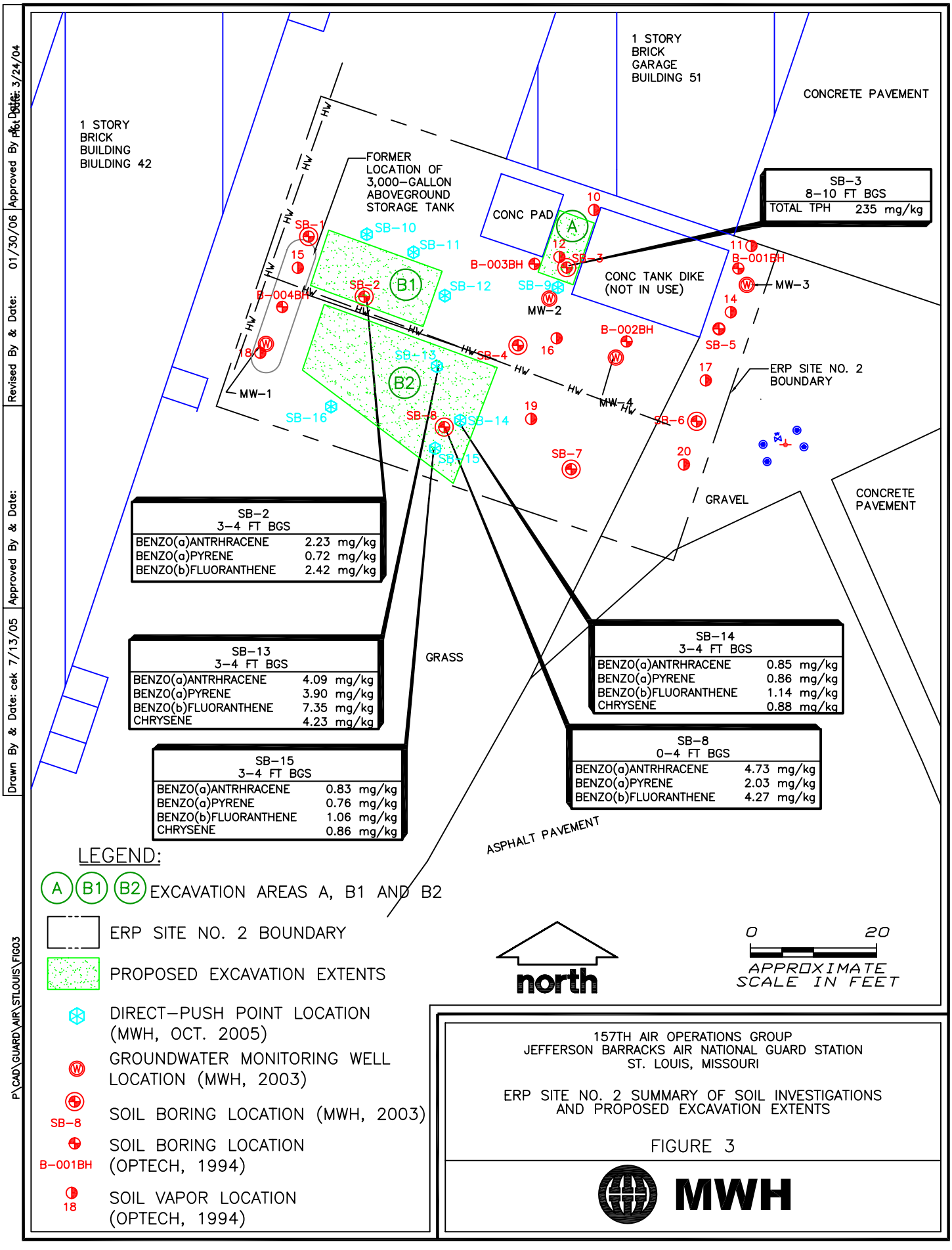
2.5 NATURE AND EXTENT OF IMPACTS

Based on results of soil sampling completed through the 2003 RI activities at Site 2, it appeared natural attenuation had reduced concentrations of chemical constituents in soil over time. As shown in Figure 3, chemical constituents in soil at concentrations greater than MDNR STARCs were generally limited to total TPH from 8 to 10 feet below ground surface (bgs) at boring SB-3 near the southwest corner of the large concrete pad (impacted Area A), and SVOCs in the shallow intervals of SB-2 and SB-8 east of the former AST (impacted Area B).

Beryllium was detected at concentrations greater than the MDNR CALM standard in ten of the twelve soil samples collected during the 1994 SI activities. Arsenic was detected at concentrations greater than the CALM standard in seven of the eight deep soil samples (seven of the total sixteen samples) collected during the 2003 RI. High levels of arsenic and beryllium are common in soils near the Station, per the geochemical survey of Missouri agricultural soils undertaken in the 1970s (Tidball, 1984), and are likely normal background levels.

The RI groundwater sampling activities conducted over two rounds in 2003 indicated no chemical constituents at concentrations greater than MDNR CALM standards. No previous groundwater sampling had been conducted at Site 2. Two rounds of water level measurements indicate a consistent local groundwater flow direction to the east.

Analytical results and analytical summary tables of the sampling activities completed through the 2003 RI activities can be found in the RI Report (MWH, 2004).



Drawn By & Date: cek 7/13/05 | Approved By & Date: | Revised By & Date: | Approved By & Date: 01/30/06 | Plot Date: 3/24/04

P:\CAD\GUARD\AIR\STLOUIS\FIG03

157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI

ERP SITE NO. 2 SUMMARY OF SOIL INVESTIGATIONS AND PROPOSED EXCAVATION EXTENTS

FIGURE 3

MWH

P:\CAD\Guard\AIR\St. Louis\Fig 03.dwg Jan/30/06

3.0 REMEDIAL ACTION ACTIVITIES

The following sections outline the field activities conducted for the RA at Site 2, including soil removal, off-site disposal, and monitoring well replacement. The principal RA elements addressed in this RA Report are as follows:

- Direct-push investigation prior to RA activities.
- Excavation of an estimated 73.7 bcy (based on 100 pounds of soil per cubic foot of 99.54 tons excavated) of soils exceeding the remediation objectives.
- Confirmatory sampling of the excavations.
- Transportation of excavated materials to a Subtitle D landfill.
- Backfilling the excavation with noncontaminated fill material and regrading of the excavated area.

These work elements have been incorporated into this RA, organized as follows:

- Soil Cleanup Objectives (Section 3.1)
- Direct-Push Investigation (Section 3.2)
- Site Preparation (Section 3.3)
- Site Excavation (Section 3.4)
- Transportation (Section 3.5)
- Site Restoration and Demobilization (Section 3.7)

3.1 SOIL CLEANUP OBJECTIVES

The acceptable soil contaminant levels (soil cleanup objectives) for Site 2 are the Missouri CALM Tier 1 STARCs listed in Table B1 of the MDNR CALM guidance document. Because the current land use is not restricted to industrial, Scenario A is used as the initial evaluation criteria. The evaluation criteria for Scenario A indicates soil concentrations must meet the lesser of the combined soil ingestion/dermal contact/inhalation pathway concentration (C_{IDI}) or the leaching-to-groundwater pathway concentration (C_{LEACH}) values. The soil cleanup objectives for COCs at Site 2 are summarized in Table 1. The COCs are the analytes that were detected at concentrations at or above soil cleanup objectives in soil samples collected during site investigations at Site 2.

TABLE 1

SOIL CLEANUP OBJECTIVES
ERP SITE NO. 2
157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI

Constituent of Concern	Soil Cleanup Objective (mg/kg)
Semivolatile Organic Compounds	
Benzo(a)anthracene	0.2
Benzo(a)pyrene	0.2
Benzo(b)fluoranthene	0.6
Chrysene*	0.2
Total Petroleum Hydrocarbons	200

Notes:
mg/kg = Milligrams per kilogram.
* Chrysene included as a constituent of concern following the October 2005 direct-push investigation.

3.2 DIRECT-PUSH INVESTIGATION

3.2.1 Investigation Methodology

Prior to commencement of excavation, a direct-push (DP) soil sampling investigation was conducted on October 20, 2005, using a Geoprobe® in order to confirm proposed lateral dimensions of required excavations. Locations of DP sampling points/soil borings are shown in Figure 3. One soil boring (SB-9) was advanced to 12 feet bgs near impacted Area A and seven soil borings were advanced to 8 feet bgs around impacted Area B. Soil samples were collected continuously from ground surface in 4-foot lifts using a stainless steel barrel lined with a clean disposable plastic sleeve. The soil from each sleeve was sampled for potential laboratory analysis and screened with a PID for VOCs.

Based on PID readings and visual observations, one soil sample from SB-9 at impacted Area A was proposed to be submitted for fixed laboratory analysis of total extractable hydrocarbons (TEH) by Iowa Method OA-2. Since PID readings and observations did not indicate a presence of VOCs in the screen samples collected from SB-9, the soil sample collected from 6 to 8 feet bgs (SB9 6-8') was submitted for laboratory analysis, which is the depth of the highest TPH concentration from SB-3.

One soil sample was collected from each of the soil borings around impacted Area B (SB-10 through SB-16) and submitted for fixed laboratory analysis of SVOCS by United States Environmental Protection Agency (USEPA) Method 8270. The samples were collected from a sampling interval if 0 and 4 feet bgs, which is the same sampling interval used for the RI at impacted Area B.

Observations of the soil encountered in soil borings SB-9 to SB-16 were recorded on the drilling logs in Appendix D, including PID readings. No particular odors or staining were observed in the soil encountered in these soil borings.

3.2.2 Analytical Results of Direct-Push Investigation

In sample SB9 6-8', which was only analyzed for TEH, no hydrocarbons were detected for any of the petroleum hydrocarbon ranges (i.e., diesel, motor oil). For the SVOC analyses of the samples

collected from 0 to 4 feet bgs from soil borings SB-10 to SB-16, no SVOCs were detected in the samples from soil borings SB-10, SB-11, SB-12, and SB-16. A total of 13 different SVOC analytes were detected in the samples from soil borings SB-13, SB-14, and SB-15; however, only the analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and chrysene had concentrations above cleanup objectives in the samples collected from three borings. Benzo(a)pyrene was detected above the cleanup objective only in sample SB-13 0-4'. Table 2 summarizes the analytical results for the DP investigation and compares the detected concentrations to the soil cleanup objectives.

3.2.3 Conclusion of Direct-Push Investigation

Analytical results of the DP investigation indicated COC concentrations greater than soil cleanup objectives at sample locations beyond the excavations areas proposed in the *Final Removal Action Work Plan, ERP Site No. 2* (MWH, 2005b). Modeling algorithms (krieging) were, therefore, used to estimate excavation extents near that location. The final proposed excavation areas were submitted in writing on November 22, 2005, to the ANG Project Manager, the MDNR Project Manager, and the ANG Contracting Officer for approval prior to implementation. The proposed estimated lateral extent of soil to be excavated is shown in Figure 3.

As proposed in the RA Work Plan, excavation of impacted soils was to be conducted at Site 2 in three excavations within the two impacted areas, Areas A and B (Figure 3). Excavation A was proposed at impacted Area A, which is near previous sample location SB-3 between the concrete pad and the concrete tank dike. This excavation, with dimensions of approximately 5 feet by 10 feet, was to be conducted to a depth of approximately 12 feet bgs. Clean overburden from 0 to 5 feet bgs was to be removed, stockpiled, and reused as backfill in Excavation A. Impacted Area B, in the vicinity of previous sample locations SB-2 and SB-8, was proposed to be divided into two separate excavations (Excavations B1 and B2) due to the presence of a marked underground water line that runs through Area B (Figure 3). Excavation B1 near SB-2 is rectangular with dimensions of approximately 10 feet by 20 feet. Excavation B2 near SB-8 is in the shape of a trapezoid with dimensions of approximately 15 feet by 30 feet. These two excavations were proposed to be approximately 6 feet deep.

TABLE 2

ANALYTICAL SUMMARY OF DIRECT-PUSH SOIL SAMPLING
OCTOBER 20, 2005
ERP SITE NO. 2
157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI
(results in mg/kg)

Analyte / Sample ID	SB9 6-8'	SB10 3-4'	SB11 3-4'	SB12 3-4'	SB13 3-4'	SB14 3-4'	SB15 3-4'	SB16 3-4'	Cleanup Objective
Total Extractable Hydrocarbons	ND	--	--	--	--	--	--	--	200
Acenaphthene	--	ND	ND	ND	1.33	ND	ND	ND	1,000
Anthracene	--	ND	ND	ND	2.21	0.41	0.40	ND	8,500
Benzo(a)anthracene	--	ND	ND	ND	**4.09**	**0.85**	**0.83**	ND	0.2
Benzo(a)pyrene	--	ND	ND	ND	**3.90**	**0.86**	**0.76**	ND	0.2
Benzo(b)fluoranthene	--	ND	ND	ND	**7.35**	**1.14**	**1.06**	ND	0.6
Benzo(g,h,I)perylene	--	ND	ND	ND	1.92	0.52	0.40	ND	NE
Chrysene	--	ND	ND	ND	**4.23**	**0.88**	**0.86**	ND	0.2
Dibenzofuran	--	ND	ND	ND	0.56	ND	ND	ND	110
Indeno(1,2,3-cd)pyrene	--	ND	ND	ND	0.92	0.36	ND	ND	1.8
Fluoranthene	--	ND	ND	ND	9.10	2.15	2.01	ND	1,600
Fluorene	--	ND	ND	ND	0.94	ND	ND	ND	1,100
Phenanthrene	--	ND	ND	ND	8.74	1.98	1.98	ND	NE
Pyrene	--	ND	ND	ND	9.85	2.50	2.16	ND	2,100

-- = Sample not analyzed for this analyte.
mg/kg = Milligram per kilogram.
ND = Not detected above laboratory method detection limits.
Cleanup Ojectives are the Tier 1 Soil Target Concentrations (STARCs) from Table B1 of the Missouri Department of Natural Resources (MDNR) Cleanup Level for Missouri (CALM) guidance document.
Values in **Bold** exceed cleanup objective.
NE = No established STARC for this analyte.

The total volume of soil excavated from Site 2 was expected to be a maximum of 143 bcy from the three excavations.

3.3 SITE PREPARATION

Mobilization and site preparation activities at Site 2 included traveling to the site; marking underground utility locations; identifying the excavation area; identifying staging areas for equipment and supplies, investigation-derived waste (IDW), used personal protective equipment, and disposable field equipment; and coordinating with MOANG personnel to ensure compliance with safety and security protocols that will not interfere with Station operations. MWH coordinated with MOANG personnel to obtain the appropriate dig permit to verify the location of underground utilities in the areas where excavation activities were to take place. In addition, as requested by MWH, 157th AOG civil engineering representatives attended the excavation activities to assist in ensuring marked and any encountered unmarked underground utilities were not harmed. Redirection or abandonment of utilities was not expected during this RA.

Prior to excavation activities on November 29, 2005, the corners of Excavations A, B1, and B2 were temporarily flagged as measured from the concrete pad at the southwest corner of Building 51 as shown in Figure 3. The presence of a marked underground electric line to the west of Excavations B1 and B2 meant that the actual excavation boundaries on the west side of this area had to be moved to the east 5 feet, as requested by the 157th AOG civil engineers. The 157th AOG civil engineers also requested that the excavation did not come within 3 feet of the marked underground water line that separates Excavations B1 and B2. Therefore, the excavation boundaries were remarked on site, as shown in Figure 4, with marking paint to account for the safe working distances from the underground utilities.

157th AOG personnel provided access to Site 2 by unlocking the gate to the southwest of Site 2 and moving the small storage building/shed from the concrete pad prior to RA activities. No clearing and grubbing of surface vegetation from the excavation area was necessary.

Due to the flat ground surface at Site 2, grading was not necessary to promote positive run-on and runoff from the areas of excavation prior to excavating contaminated soils. A sheet of

durable plastic sheeting was placed on the ground south of excavation areas in order to separate the stockpiled excavated soil from the ground surface.

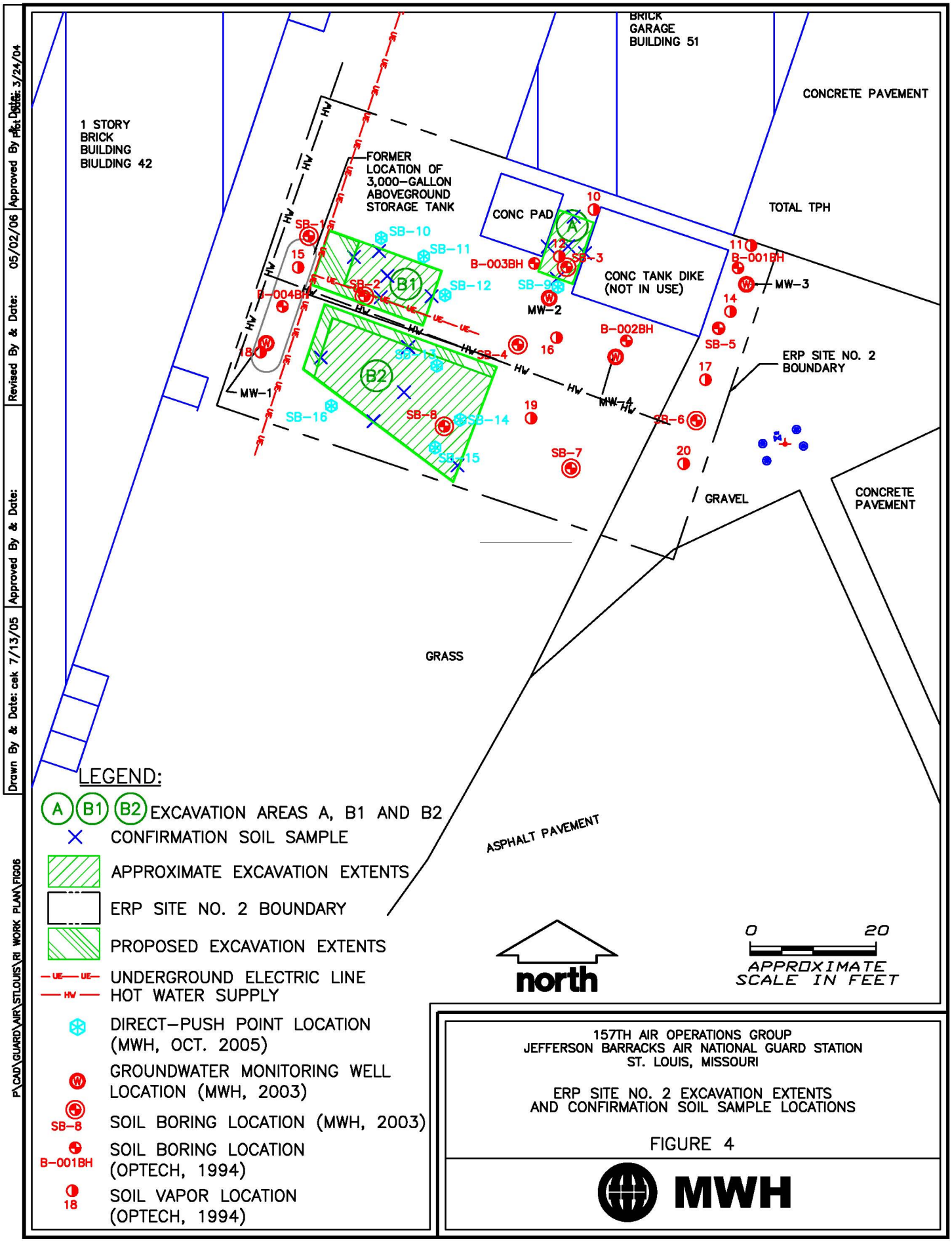
3.4 SITE EXCAVATION

3.4.1 Excavation of Impacted Soils

Soil excavation began the morning of November 29, 2005 and was completed that afternoon. An MWH representative oversaw the excavation, stockpiling, and loading of soils into trucks for transportation and off-site disposal. The excavation activities were completed by Evans Environmental Construction of Glenwood, Iowa using a wheel-mounted excavator equipped with a front-end loader for truck loading and backfilling. A small front-end loader was also used for backfilling and grading.

Excavated materials from Site 2 were temporarily stockpiled on plastic sheeting. While waiting to be loaded into trucks for transportation to the disposal facility, the stockpile was covered with plastic sheeting which was secured with large cinder blocks. On December 1, 2005, the stockpiled soil was loaded into four dump trucks for transportation to Roxana Landfill in Roxana, Illinois, a licensed Subtitle D facility. The excavated soils were transported by Beelman Truck Company, of East St. Louis, Illinois.

Excavation extents are shown in Figure 4. As proposed in the RA Work Plan, Excavation A was conducted to a depth of approximately 12 feet bgs with dimensions of approximately 5 feet by 10 feet. Clean overburden from 0 to 5 feet bgs was removed, stockpiled, and reused as backfill in Area A. Excavations B1 and B2 were conducted to a depth of approximately 6 feet bgs. Excavation B1 was rectangular, with dimensions of approximately 7 feet by 12 feet. Excavation B2 was shaped like a trapezoid with dimensions of approximately 17 feet by 23 feet. The total volume of impacted soil excavated from Site 2 was estimated at approximately 73.7 bcy (based on 100 pounds of soil per cubic foot of 99.54 tons excavated). With the exception of the known underground water line that separates Excavations B1 and B2, underground utilities were not known to be located within the planned excavation areas. However, two electric lines within plastic conduits were encountered at the southern boundary of Excavation B1 (Figure 4). These electric lines are located less than 2 feet bgs, are 1 foot apart, and adjacent to one another. These


BRICK GARAGE BUILDING 51
CONCRETE PAVEMENT
1 STORY BRICK BUILDING BIULDING 42
FORMER LOCATION OF 3,000-GALLON ABOVEGROUND STORAGE TANK
CONC PAD
TOTAL TPH
CONC TANK DIKE (NOT IN USE)
ERP SITE NO. 2 BOUNDARY
GRASS
GRAVEL
CONCRETE PAVEMENT
ASPHALT PAVEMENT
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-11
SB-12
SB-13
SB-14
SB-15
SB-16
B-001BH
B-002BH
B-003BH
B-004BH
MW-1
MW-2
MW-3
MW-4
A
B1
B2
10
11
12
13
14
15
16
17
18
19
20
HW
UE
LEGEND:
EXCAVATION AREAS A, B1 AND B2
CONFIRMATION SOIL SAMPLE
APPROXIMATE EXCAVATION EXTENTS
ERP SITE NO. 2 BOUNDARY
PROPOSED EXCAVATION EXTENTS
UNDERGROUND ELECTRIC LINE
HOT WATER SUPPLY
DIRECT-PUSH POINT LOCATION (MWH, OCT. 2005)
GROUNDWATER MONITORING WELL LOCATION (MWH, 2003)
SOIL BORING LOCATION (MWH, 2003)
SOIL BORING LOCATION (OPTECH, 1994)
SOIL VAPOR LOCATION (OPTECH, 1994)
north
0
20
APPROXIMATE SCALE IN FEET
Drawn By & Date: cek 7/13/05
Approved By & Date:
Revised By & Date: 05/02/06
Approved By & Plot Date: 3/24/04
P:\CAD\GUARD\AIR\STLOUIS\RI WORK PLAN\FIG06
157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI
ERP SITE NO. 2 EXCAVATION EXTENTS
AND CONFIRMATION SOIL SAMPLE LOCATIONS
FIGURE 4
MWH
P:\CAD\Guard\AIR\St. Louis\Fig 04.dwg May/02/06

electric lines were unharmed during excavation activities. Excavation was not performed below the groundwater table and no water was encountered during excavation. Photographs of the excavation events are included in Appendix C.

3.4.2 PID Screening of Impacted Soils

During excavation of impacted soils, grab soil samples were collected from the impacted material from each excavation area and were screened on site for total VOCs using a Photovac 2020 PID. Two screen samples were collected from the center of Excavation A. One screen sample was collected at a depth of 10 feet bgs and the other at a depth between 5 and 6 feet bgs. These samples had PID readings of 965 parts per million (ppm) and 232 ppm, respectively. One screen sample was collected from a depth of 3 feet bgs from the center of Excavation B2. This sample had a PID reading of 0.0 ppm. Prior to use, this PID was calibrated with ambient air and 100 ppm isobutylene, in accordance with manufacturer specifications.

3.4.3 Confirmation Soil Sampling Approach

Upon reaching the anticipated excavation limits, visual observations and PID readings were used as a screening method to assess if the soils with contaminant levels above the cleanup objectives had been removed to the extent confirmatory samples should be collected for laboratory analysis. The PID was tested against clean soil in the vicinity of the excavation area to assess readings that may be indicative of impacted soil. Depending upon the PID readings, the presence of staining, or olfactory evidence of potentially impacted soil in the excavation, professional judgement was utilized to determine when confirmation samples should be collected. Confirmatory soil samples were collected from the bottom of the excavation and along the sidewalls to confirm the removal of soils exceeding the cleanup objectives. As specified in Section 3.3.2 of the RA Work Plan, the sampling approach used was a statistical random sampling strategy to minimize any sampling biases. The calculated sample locations determined that excavation sidewall samples were collected at a frequency of one sample for each sidewall around each excavation. While on site, a verbal request was made by MWH to Mr. Steve Lang of the MDNR on November 29, 2005 to collect floor samples in addition to the sidewall samples proposed in the RA Work Plan. Mr. Lang verbally approved the request. Sidewall samples were collected approximately at the

proposed locations shown in Figure 7 of the RA Work Plan. One soil sample was also collected at the floor of each excavation. A total of 3 confirmation floor samples and 12 confirmation sidewall samples were collected on November 29, 2005 at the confirmation soil sample locations shown in Figure 4.

3.4.4 Confirmatory Sample Collection, Handling, and Analysis

The MWH Project Engineer coordinated with the excavator operator to obtain confirmation soil samples from the excavation sidewalls and floor of the excavation. Sample locations are presented in Figure 4. Sidewall samples from Excavation A were collected at an approximate depth of 9 feet bgs, which is within the depth range of the most impacted soil in that area as determined in the RI of Site 2 (MWH, 2004). The floor sample from Excavation A was collected at a depth of 12 feet bgs. The sidewall samples collected from Excavations B1 and B2 were collected at a depth of 3 feet bgs. The floor samples collected from Excavations B1 and B2 were collected at a depth of 6 feet bgs.

Samples collected from the floor of the excavation were labeled in a manner which states the excavation area (ExA, ExB1, or ExB2) followed by the sample position (SW for excavation sidewall or FL for excavation floor), the sidewall location (North, South, East, or West- not applicable to floor samples), and the approximate depth of the sample below ground surface. For example, the sidewall sample collected from the west sidewall of Excavation B2 is labeled as ExB2-SW-West-3' and the floor sample from Excavation A is labeled as ExA-FL-12'. The soil confirmation samples were collected directly from the excavator bucket with the exception of samples ExB1-SW-West-3' and ExB1-SW-South-3', which were collected using a shovel due to their close proximity to the encountered electric lines.

The sampling was undertaken in accordance with the RA Work Plan and Quality Assurance Project Plan (Appendix A of the RA Work Plan).

Confirmation soil samples were analyzed at Keystone Laboratories, Inc. in Newton, Iowa using USEPA Methods and methods approved by the State of Missouri. Each sample collected from

Excavation A was analyzed for TEH using Iowa Method OA-2. Each sample collected from Excavations B1 and B2 was analyzed for SVOCs using USEPA Method 8270C.

Quality control (QC) samples were collected and analyzed to assess the quality of the sampling effort and the analytical data. The QC samples included two duplicates and one matrix spike/matrix spike duplicate (MS/MSD) sample. The samples Site 2-Dup1 and Site 2-Dup2 were duplicates of samples ExA-SW-East-9'and ExB2-SW-North-3' respectively. Extra soil volume was collected for MS/MSD analysis at sample location ExB1-SW-East-3'. Analytical results of the QC samples and validation of laboratory analytical data are discussed in Section 3.4.5.

3.4.5 Analytical Results of Confirmation Soil Samples

The confirmation soil samples collected from Excavation A were analyzed for TEH by Iowa Method OA-2. Extractable hydrocarbons, mostly in the mineral spirits and waste oil ranges, were detected in all samples from Excavation A, except for sample ExA-SW-West-9', which had no detectable TEH. TEH ranged from 9 milligrams per kilogram (mg/kg) in ExA-FL-12' to 147 mg/kg in ExA-SW-East-9'. TEH did not exceed the soil cleanup objective in any of the confirmation soil samples from Excavation A. The confirmation soil sampling results for the samples collected from Excavation A are summarized in Table 3.

The confirmation soil samples collected from Excavations B1 and B2 were analyzed for SVOCs by USEPA Method 8270. SVOCs were not detected in any of the confirmation soil samples from Excavations B1 and B2. The confirmation soil sampling results for the samples collected from Excavations B1 and B2 are summarized in Table 4. Complete analytical reports for the soil confirmation samples are included in Appendix B.

The soil samples, including QC samples, were reviewed by an MWH chemist based on results of the data evaluation parameters and QC sample results provided by the laboratory. Details and findings of the analytical review (data validation) are included in the Data Validation Reports in Appendix E. Based on results of the data validation, all data are considered complete and valid as qualified.

TABLE 3

ANALYTICAL SUMMARY OF CONFIRMATION SOIL SAMPLES
NOVEMBER 2005 EXCAVATION A
ERP SITE NO. 2
157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI
(results in mg/kg)

Sample ID	Total Extractable Hydrocarbons (TEH)	TEH as Kerosene	TEH as Mineral Spirits	TEH as Hydraulic Fluid	TEH as Gasoline	TEH as Diesel Fuel	TEH as Waste Oil	PID Reading (ppm)
ExA-SW-North-9'	75	ND	19	ND	ND	ND	57	2.5
ExA-SW-East-9'	147	ND	6	ND	ND	ND	141	4.3
ExA-SW-West-9'	ND	ND	ND	ND	ND	ND	ND	1.4
ExA-SW-South-9'	34	ND	14	ND	ND	ND	20	89
ExA-FL-12'	9	ND	ND	ND	ND	ND	9	3.0
Dup-1	5	ND	ND	ND	ND	5	ND	--
Cleanup Objective	200*	NE	NE	NE	NE	NE	NE	

Notes:

Cleanup Ojectives are the Tier 1 Soil Target Concentrations (STARC) from Table B1 of the Missouri Department of Natural Resources (MDNR) Cleanup Level for Missouri (CALM) guidance document.
Dup-1 = Duplicate sample of ExA-SW-East-9'.
mg/kg = Milligrams per kilogram.
ND = None detected above laboratory method detection limits.
NE = No established STARC for this analyte.
* = Cleanup objective (STARC) is for total petroleum hydrocarbons (TPH).
-- = Photoionization detector (PID) reading not taken of this sample.

TABLE 4

ANALYTICAL SUMMARY OF CONFIRMATION SOIL SAMPLES
NOVEMBER 2005 EXCAVATION B
ERP SITE NO. 2
157TH AIR OPERATIONS GROUP
JEFFERSON BARRACKS AIR NATIONAL GUARD STATION
ST. LOUIS, MISSOURI

Excavation	Sample ID	Semivolatile Organic Compounds (mg/kg)	PID Reading (ppm)
B1	ExB1-SW-North-3'	ND	1.2
B1	ExB1-SW-East-3'	ND	0.0
B1	ExB1-SW-West-3'	ND	--
B1	ExB1-SW-South-3'	ND	--
B1	ExB1-FL-6'	ND	0.0
B2	ExB2-SW-North-3'	ND	0.0
B2	ExB2-SW-East-3'	ND	0.0
B2	ExB2-SW-West-3'	ND	0.0
B2	ExB2-SW-South-3'	ND	0.0
B2	ExB2-FL-6'	ND	0.0
B2	Dup-2	ND	0.0

Notes:
Dup-2 = Duplicate sample of ExB2-SW-North-3'.
mg/kg = Milligrams per kilogram.
ND = None detected above laboratory method detection limits.
ppm = Parts per million of volatile organic compounds.
-- = Photoionization detector (PID) reading not taken of this sample.

3.5 TRANSPORTATION

Excavated materials were stockpiled on site for subsequent loading into trucks for transport to Roxana Landfill, a licensed Subtitle D disposal facility. Transportation of materials was conducted using applicable United States Department of Transportation (USDOT), Illinois Department of Transportation (IDOT), and Missouri Department of Transportation (MDOT) placarding and manifesting requirements.

Loaded trucks were covered with tarpaulins during transport to the disposal facility. While loading, the trucks were restricted to previously excavated and confirmed "clean" areas of the excavation and site. Therefore, the truck's tires would not come in direct contact with the contaminated soils and would not need to be decontaminated prior to leaving Site 2.

A total of four loads of impacted soil totaling 99.54 tons were hauled off site to Roxana Landfill on December 1, 2005. The waste disposal log for the RA project is presented in Appendix A along with copies of the waste manifests and load tickets.

3.6 SITE RESTORATION AND DEMOBILIZATION

Upon receipt of analytical results below the cleanup objectives, the excavation was backfilled with a clean, suitable fill material (sand) on December 2, 2005. Clean fill was obtained from an off-site source. Backfill was completed and compacted using the excavator. Areas where vegetative cover was removed as a result of the RA activities were graded to meet the existing grade. To allow the excavated area to be restored to preexcavation condition, perennial rye grass was spread on the surface of the excavation backfill material, in an effort to revegetate the excavation area.

At the completion of excavation activities, any residual soil on the excavation equipment was removed by a shovel and brush. Contaminated soil generated from the decontamination procedures was placed on the excavated soil stockpile and transported to Roxana Landfill for disposal.

4.0 REFERENCES

Missouri Department of Natural Resources. 2001. *Cleanup Levels for Missouri (CALM) Appendix B. Tier 1 Soil and Groundwater Cleanup Standards*. June 29.

MWH Americas, Inc. (MWH) 2004. *Final ERP Site No. 2 Remedial Investigation Report, 157th Air Operations Group, Jefferson Barracks Air National Guard, St. Louis, Missouri*. October.

MWH, 2005a. *Draft Further Action Decision Document, ERP Site No. 2, 157th Air Operations Group, Jefferson Barracks Air National Guard, St. Louis, Missouri*. July.

MWH, 2005b. *Final Removal Action Work Plan, ERP Site No. 2, 157th Air Operations Group, Jefferson Barracks Air National Guard, St. Louis, Missouri*. October.

Operational Technologies Corporation, March 1997. *Installation Restoration Program Preliminary Assessment/Site Inspection Report, 157th Air Control Group, Jefferson Barracks Air National Guard, Missouri Air National Guard, St. Louis, Missouri*, Final Version, Volumes I and II, San Antonio, Texas.

APPENDIX A

APPENDIX A

LANDFILL SUBTITLE D CERTIFICATION, WASTE DISPOSAL LOG, AND WASTE MANIFESTS

ALLIED WASTE SERVICES

May 4, 2006

Reference: Profile #338Y515938

Adam Newman
MWH Constructors
370 Interlocken Blvd. Suite 200
Broomfield, CO 80021

Dear Adam Newman:

MWH Constructors profiled Soil Contaminated with Motor Oil for disposal at Roxana Landfill. The loads were hauled in on December 1, 2005. Disposal ticket numbers 483660, 483662, 483674, and 483676. The material was considered to be an Alternate Daily Cover (ADC), and was used as so.

Attached you will find the cover sheet for the Roxana Landfill Permit.

Should you have any questions or need any additional information, please call me @ 618-779-6497, or you may email me @ jill.kahl@awin.com.

Thank you,

Jill Kahl

Jill Kahl
Special Waste Sales Support
Allied Waste/Missouri District
Enclosure (1)

JK

4601 Cahokia Creek Rd
Edwardsville, IL 62025
618.656.6883 / FAX 618.656.6882
www.disposal.com

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276, 217-782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

ROD R. BLAGOJEVICH, GOVERNOR RENEE CIPRIANO, DIRECTOR

217/524-3300

June 6, 2005

Certified Mail
7002 3150 0000 1253 0948

OWNER/OPERATOR
Roxana Landfill, Inc.
Attn: Mr. Matt Kingsley
4600 Cahokia Creek Road
P.O. Box 97
Roxana, Illinois 62084-0097

Re: 1190900002 – Madison County
Roxana Landfill Inc
Permit No. 1990-322-LF
Modification No. 48
Log No.: 2002-341
Issue Date: January 19, 1994
Expiration Date: January 15, 2009
Permit File

Dear Mr. Kingsley:

Permit has been granted to Roxana Landfill, Inc., as owner and operator, approving development and operation of an existing municipal solid waste and non-hazardous special waste landfill all in accordance with the application and plans provided. Final plans, specifications, application, and supporting documents, as submitted and approved, shall constitute part of this permit and are identified in the records of the Illinois Environmental Protection Agency (the "Illinois EPA"), Bureau of Land, Division of Land Pollution Control by the permit number designated in the heading above.

Permit No. 1990-322-LF, Modification No. 1 (hereinafter "Permit Modification No. 1") issued January 19, 1994 approved:

a. The development of a horizontal expansion (approximately 72.4 acres) which extends to the west and the north from the 50.8 acre landfill unit approved under Permit No. 1990-322-LF issued May 27, 1993. A portion of this expansion is above the existing landfill units formerly known as Barton 1 North and Barton 2. Thus, completion of the existing unit and approved expansions shall result in a single landfill unit with an approximate area of 104.0 acres within its waste boundaries, an "in-place" net disposal capacity of approximately 9,244,910 cubic yards, and a maximum final elevation of approximately 592 feet above mean sea level.

WASTE DISPOSAL LOG

PROJECT NAME: Jefferson Barracks ANG Station, St. Louis, Missouri

PROJECT LOCATION: ERP Site 2 RA - 2005

Project Number: 2090955

Date: 12/1/2005

Page: 1 of 1

SHIPMENT NO.	SHIPMENT DESCRIPTION	DISPOSAL FACILITY	SHIPMENT DATE	DISPOSAL TICKET NO.	DISPOSAL QUANTITY TONS	COMMENTS
1	Soils 20 CY.	Roxana Landfill	12/1/2005	483660	26.30	Waste Oil Contaminated Soil
2	Soils 20 CY.	Roxana Landfill	12/1/2005	483662	26.16	Waste Oil Contaminated Soil
3	Soils 20 CY.	Roxana Landfill	12/1/2005	483674	24.08	Waste Oil Contaminated Soil
4	Soils 20 CY.	Roxana Landfill	12/1/2005	483676	23.00	Waste Oil Contaminated Soil
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
					99.54	**Total**

Landfill address: Roxana Landfill, 4600 Cahokia Creek Road, Roxana, Illinois 62084.

ALTERNATE STRAIGHT BILL OF LADING—SHORT FORM—MEMORANDUM COPY

Name of Carrier: Eastward	Carrier's No.	Date	Shipper No.
TO Consignee: Louisiana Landfill	FROM Shipper: Jefferson Concrete		
Street			
Destination / Zip Code			Emergency Response Phone No.
Route:			Vehicle No.

No. Shipping Units	HM	Kind of Package, Description of Articles, Special Marks and Exceptions	* Weight (Sub. to Corr.)	RATE	✓	CHARGES
TIME IN 8:30		Load off				
TIME OUT 9:07		Dan - Key Rick				
① # TRUCK 961						

REMIT C.O.D. TO: ADDRESS	C.O.D. AMT:	C.O.D. FEE: PREPAID ☐ $ COLLECT ☐	TOTAL CHARGES: $

* If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight".

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding
$_____ per _____

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other charges.
_____
[Signature of Consignor]

FREIGHT CHARGES
Check Appropriate Box:
☐ Freight prepaid ☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of receipt by the carrier of the property described in the Original Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

"This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation."

ROXANA LANDFILL
4600 CAHOKIA CREEK RD
ROXANA, IL. 62084
618-656-6912

500420
M&H CONSTRUCTORS, INC.
370 INTERLOCKEN BLVD, SUITE 200
BROOMFIELD, CO 80021
Contract: #230Y515938

SITE	TICKET	GRID
01	483660	

WEIGHMASTER: UE00070

DATE IN	TIME IN
1 December 2005	10:22 am

DATE OUT	TIME OUT
1 December 2005	10:39 am

VEHICLE	ROLL OFF
BTTT20961	

REFERENCE	ORIGIN
	MISSOURI

00 Gross Weight 83,440.00 lb Inbound -
Tare Weight 30,840.00 lb
Net Weight 52,600.00 lb 26.30 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.30	TN	20 EXCAVT SOIL TONS				
1.00	LD	C) E2ENVIRONMENTAL FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

Operating hours: Mon. - Fri. 4a.m. - 4p.m. Saturdays 6:30a.m. - 12p.m. Have a great day!!

Brad 94/3752

SIGNATURE _____

This Memorandum **is an acknowledgment that a Bill of Lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.**

Carrier's Pro No. _____
Shipper's Bill of Lading No. _____
Consignee's Reference/PO No. _____
Carrier's Code (SCAC) _____

(Name of Carrier)

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request.

at _____ **20** _____ **From** _____

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract), agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official, Southern, Western and Illinois Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to _____

(Mail or street address of consignee – For purposes of notification only.)

Destination _____ **State** _____ **Zip** _____ **County** _____ **Delivery Address ★** _____

★ To be filled in only when shipper desires and governing tariffs provide for delivery thereof.

Route _____

Delivering Carrier _____ **Car or Vehicle Initials** _____ **No.** _____

No. Packages	Kind of Package, Description of Articles, Special Marks, and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column
	(2)			
	TIME IN 9:30			
	TIME OUT 9:23			

* If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether it is carrier's or shipper's weight.
NOTE – Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ **per** _____

Liability Limitation for loss or damage on this shipment may be applicable. See 49 U.S.C. § 14706(c)(1)(A) and (B).

†The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of the Consolidated Freight Classification.

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____
(Signature of Consignor)

Freight charges are PREPAID unless marked collect. CHECK BOX IF COLLECT ☐

Received $ _____
to apply in prepayment of the charges on the property described hereon.

_____
Agent or Cashier

Per _____
(The signature here acknowledges only the amount prepaid.)

Charges Advanced:
$ _____

†Shipper's imprint in lieu of stamp; not a part of Bill of Lading approved by the Interstate Commerce Commission.

Shipper, Per _____ **Agent, Per** _____

ROXANA LANDFILL
4600 CAHOKIA CREEK RD
ROXANA, IL. 62084
618-656-6912

500420
M&H CONSTRUCTORS, INC.
370 INTERLOCKEN BLVD, SUITE 200
BROOMFIELD, CO 80021
Contract: #338Y515938

SITE	TICKET	CR D
01	4636662	

WEIGHMASTER: TB00070

DATE IN	TIME IN
1 December 2005	10:24 am

DATE OUT	TIME OUT
1 December 2005	10:44 am

VEHICLE	ROLL OFF
BTTT205156	

REFERENCE	ORIGIN
	MISSOURI

00 Gross Weight 78,460.00 lb Inbound --
Tare Weight 28,140.00 lb
Net Weight 50,320.00 lb 25.16 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
25.16	TN	ZD EXCONT SOIL TONS				
1.00	LD	CO ENVIRONMENTAL FEE				

Operating hours: Mon. - Fri. 4a.m. - 4p.m. Saturdays 6:30a.m. - 12p.m. Have a great day!!

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

SIGNATURE John L. Myers

THIS MEMORANDUM is an acknowledgement that a bill of lading has been issued and is not the Original Bill of Lading, not a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No. SWI-3825

(Carrier) Redman SCAC. _____ Carrier's No. _____

Received, subject to the classifications and tariffs in effect on the date of this Bill of Lading:

at _____, date 12-1-05 from Jefferson Brands

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained (as specified in Appendix B to Part 1035) which are hereby agreed to by the shipper and accepted for himself and his assigns.

(Mail or street address of consignee for purposes of notification only.)

TO:
Consignee Roxana Lot 151
Street
Destination Roxana, IL Zip

FROM:
Shipper Jefferson Brands
Street
Origin St. Louis, Mo Zip

Route:

Delivering Carrier Redman

Trailer Initial/Number SWI 3825

U.S. DOT Hazmat Reg. Number

No. of packages	HM	Description of articles, special marks, and exceptions	Hazard Class	I.D. Number	Packing Group	Weight (subject to correction)	Class or rate	Labels required (or exemption)	Check column
1		TRL Load New Haz	Dunnage						

3 Tank Time In 8:30 Time Out 9:37

Remit C.O.D. to:
Address:
City: State: Zip:

COD AMT: $

Charges Advanced $ _____

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of consignor)

C. O. D. FEE: Prepaid ☐ Collect ☐ $

FREIGHT CHARGES ☐ Prepaid ☐ Collect

If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." Note. – Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Per _____

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO - FURNISHED BY CARRIER

DRIVER'S SIGNATURE

SHIPPER: _____

PER: _____ DATE: _____

CARRIER: Redman

PER: Jason Thompson DATE: 12-1-05

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

ROXANA LANDFILL
4600 CANOKIA CREEK RD
ROXANA, IL. 62084
618-656-6712

500420
MWH CONSTRUCTORS, INC.
3Z% INTERLOCKEN BLVD., SUITE 200
BROOMFIELD, CO 80021
Contract: #338Y515939

SITE	TICKET	GR D
01	483674	

WEIGHTMASTER
JB00070

DATE IN	TIME IN
1 December 2005	10:41 am
DATE OUT	**TIME OUT**
1 December 2005	10:56 am

VEHICLE	ROLL OFF
STTT205141	

REFERENCE	ORIGIN
	MISSOURI

00 Gross Weight 75,400.00 lb Inbound --
Tare Weight 27,240.00 lb
Net Weight 48,160.00 lb 24.08 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.08	TN	ZD DISCOUNT SOIL TONS				
1.00	LD	0 DENVIRONMENTAL FEE				

Operating hours: Mon. - Fri. 4a.m. - 4p.m. Saturdays 6:30a.m. - 12p.m. Have a great day!!

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE Susan Chapman

ALTERNATE STRAIGHT BILL OF LADING—SHORT FORM—ORIGINAL—NOT NEGOTIABLE

Name of Carrier	Carrier's No.	Date	Shipper No.
BEELMAN TRUCK CO	38624	12-1-05	5144

TO Consignee:

Street:

Destination: SOUTH ROXANA Zip Code

FROM Shipper: Jefferson Barracks St Louis, mo

Emergency Response Phone No.

Route: LAND FILL

Vehicle No.

No. Shipping Units	HM	Kind of Package, Description of Articles, Special Marks and Exceptions	*Weight (Sub. to Corr.)	RATE	✓	CHARGES
1 LOAD		Non HAZ DIRT				
		Bill to M.W.H Incorp.				
Truck # 5144		TIME IN 6:30 a.m. TIME OUT				

REMIT C.O.D. TO: ADDRESS

C.O.D. AMT.

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

* If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight".

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$_____ per _____

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

FREIGHT CHARGES

Check Appropriate Box:

☐ Freight prepaid ☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of receipt by the carrier of the property described in the Original Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

"This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation."

_____ Shipper, Per _____

_____ Agent, Per Wayne Elliott

P. 005/005

DEC-09-2005(FRI) 15:16

ROXANA LANDFILL
4600 CAHOKIA CREEK RD
ROXANA, IL. 62084
618-656-6912

500420
MWH CONSTRUCTORS, INC.
370 INTERLOCKEN BLVD, SUITE 200
BROOMFIELD, CO 80021
Contract: #333Y515738

SITE	TICKET	GRID
01	483676	

WEIGHMASTER: JB00070

DATE IN	TIME IN
1 December 2005	10:42 am

DATE OUT	TIME OUT
1 December 2005	10:57 am

VEHICLE	ROLL OFF
BTTT205144	

REFERENCE	ORIGIN
	MISSOURI

-- 00 Gross Weight 73,200.00 lb Inbound --
Tare Weight 27,200.00 lb
Net Weight 46,000.00 lb 23.00 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.00	TN	ZD EXCONT SOIL TONS				
1.00	LD	CO EXENVIRONMENTAL FEE				

Operating hours: Mon. - Fri. 4a.m. - 4p.m. Saturdays 6:30a.m. - 12p.m. Have a great day!!

NET AMOUNT
TENDERED
CHANGE
CHECK NO

5144-38624

SIGNATURE Wayne Elliott

APPENDIX B

APPENDIX B

ANALYTICAL REPORTS

Keystone
LABORATORIES, INC.

MEMBER ACIL

RECEIVED
NOV 18 2005
MW / IOWA

09 November 2005

Adam Newman
Montgomery Watson Harza-IA
11153 Aurora Avenue
Des Moines, IA 50322

RE: Jefferson Barracks ANG
DAHA-A0066-84322-OF

Enclosed are the results of analyses for samples received by the laboratory on 10/21/05 11:15. If you have any questions concerning this report, please feel free to contact me at 1-800-858-5227.

Sincerely,

Jeffrey King

Jeffrey King, Ph.D.
Laboratory Director

Phone 641-792-8451
600 East 17th Street South
Newton, IA 50208
Fax 641-792-7989

Keystone LABORATORIES, INC.

MEMBER ACIL

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 2-SB9 6-8'	15J0975-01	Soil	10/20/05 09:25	10/21/05 11:15
Site 2-SB10 3-4'	15J0975-02	Soil	10/20/05 09:50	10/21/05 11:15
Site 2-SB11 3-4'	15J0975-03	Soil	10/20/05 10:08	10/21/05 11:15
Site 2-SB12 3-4'	15J0975-04	Soil	10/20/05 10:25	10/21/05 11:15
Site 2-SB13 3-4'	15J0975-05	Soil	10/20/05 10:45	10/21/05 11:15
Site 2-SB14 3-4'	15J0975-06	Soil	10/20/05 11:00	10/21/05 11:15
Site 2-SB15 3-4'	15J0975-07	Soil	10/20/05 11:15	10/21/05 11:15
Site 2-SB16 3-4'	15J0975-08	Soil	10/20/05 11:30	10/21/05 11:15
Site 2-Dup-1	15J0975-09	Soil	10/20/05 00:00	10/21/05 11:15
Site 2-Dup-2	15J0975-10	Soil	10/20/05 00:00	10/21/05 11:15

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB9 6-8'
15J0975-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1J53125	10/31/05	11/02/05	Iowa OA-2	
TEH, as mineral spirits	ND	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	ND	5	"	"	"	"	"	"	
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	ND	5	"	"	"	"	"	"	
TEH, as waste oil	ND	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	ND	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*64.8 %*	*50-131*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB10 3-4'
15J0975-02 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/02/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB10 3-4'
15J0975-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K50141	11/01/05	11/02/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*68.5 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*110 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*70.9 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*83.6 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB10 3-4'
15J0975-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*92.8 %*		*54-140*	*1K50141*	*11/01/05*	*11/02/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*105 %*		*50-124*	"	"	"	"	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**82.0**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB11 3-4'
15J0975-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/02/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB11 3-4'
15J0975-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K50141	11/01/05	11/02/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*54.4 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*88.1 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*67.1 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*76.8 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB11 3-4'
15J0975-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*70.9 %*		*54-140*	*1K50141*	*11/01/05*	*11/02/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*97.4 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**80.4**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB12 3-4'
15J0975-04 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB12 3-4'
15J0975-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*53.5 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*73.4 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*68.4 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*70.6 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB12 3-4'
15J0975-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*83.4 %*		*54-140*	*1K50141*	*11/01/05*	*11/03/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*85.9 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**83.2**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB13 3-4'
15J0975-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	**1.33**	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB13 3-4'
15J0975-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Dibenzofuran	**0.56**	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	**0.94**	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	**8.74**	0.33	"	"	"	"	"	"	
Anthracene	**2.21**	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	**9.10**	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	**9.85**	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	**4.09**	0.33	"	"	"	"	"	"	
Chrysene	**4.23**	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	**0.92**	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	**7.35**	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	**3.90**	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	**1.92**	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*110 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*112 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*83.7 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*101 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB13 3-4'
15J0975-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*83.9 %*		*54-140*	*1K50141*	*11/01/05*	*11/03/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*99.0 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**86.8**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB14 3-4'
15J0975-06 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB14 3-4'
15J0975-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	**1.98**	0.33	"	"	"	"	"	"	
Anthracene	**0.41**	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	**2.15**	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	**2.50**	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	**0.85**	0.33	"	"	"	"	"	"	
Chrysene	**0.88**	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	**0.36**	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	**1.14**	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	**0.86**	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	**0.52**	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*72.7 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*100 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*84.2 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*78.1 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB14 3-4'
15J0975-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*79.7 %*	*54-140*		*1K50141*	*11/01/05*	*11/03/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*104 %*	*50-124*		*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**83.7**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB15 3-4'
15J0975-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB15 3-4'
15J0975-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	IK50141	11/01/05	11/03/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	**1.98**	0.33	"	"	"	"	"	"	
Anthracene	**0.40**	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	**2.01**	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	**2.16**	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	**0.83**	0.33	"	"	"	"	"	"	
Chrysene	**0.86**	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	**1.06**	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	**0.76**	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	**0.40**	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*94.8 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*119 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*81.8 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*99.5 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB15 3-4'
15J0975-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*89.8 %*	*54-140*		*1K50141*	*11/01/05*	*11/03/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*104 %*	*50-124*		*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**85.5**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB16 3-4'
15J0975-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/02/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB16 3-4'
15J0975-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K50141	11/01/05	11/02/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*85.4 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*124 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*90.8 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*103 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-SB16 3-4'
15J0975-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*114 %*		*54-140*	*1K50141*	*11/01/05*	*11/02/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*132 %*		*50-124*	"	"	"	"	*S-BN*
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**84.0**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-Dup-1
15J0975-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1J53125	10/31/05	11/02/05	Iowa OA-2	
TEH, as mineral spirits	ND	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	**10**	5	"	"	"	"	"	"	D-06
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	ND	5	"	"	"	"	"	"	
TEH, as waste oil	ND	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	**10**	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*57.3 %*	*50-131*		"	"	"	"	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-Dup-2
15J0975-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-Dup-2
15J0975-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K50141	11/01/05	11/03/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	**1.18**	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	**1.09**	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	**1.17**	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	**0.51**	0.33	"	"	"	"	"	"	
Chrysene	**0.45**	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	**0.70**	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	**0.47**	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*76.5 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*118 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*73.6 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*81.2 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Site 2-Dup-2
15J0975-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*69.1 %*		*54-140*	*1K50141*	*11/01/05*	*11/03/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*101 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**83.5**	0.1	%	1	1J52644	10/26/05	10/27/05	% calculation	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Extractable Petroleum Hydrocarbons - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15K0204 - 1J53125										
Calibration Check (15K0204-CCV1)				Prepared & Analyzed: 11/01/05						
TEH, as kerosene	1947		mg/kg	2030		95.9	85-115			
TEH, as mineral spirits	2065		"	2020		102	85-115			
TEH, as hydraulic fluid	1931		"	2020		95.6	85-115			
TEH, as gasoline	1805		"	2010		89.8	85-115			
TEH, as #2 diesel fuel	2066		"	2000		103	85-115			
TEH, as waste oil	1821		"	2030		89.7	85-115			
Surrogate: Pentacosane	*43.8*		"	*52.6*		*83.3*	*50-131*			
Batch 1J53125 - 3545 OA-2 PFE										
Blank (1J53125-BLK1)				Prepared: 10/31/05 Analyzed: 11/01/05						
TEH, as kerosene	ND	5	mg/kg							
TEH, as mineral spirits	ND	5	"							
TEH, as hydraulic fluid	ND	5	"							
TEH, as gasoline	ND	5	"							
TEH, as #2 diesel fuel	ND	5	"							
TEH, as waste oil	ND	5	"							
Total Extractable Hydrocarbons	ND	5	"							
Surrogate: Pentacosane	*1.65*		"	*2.58*		*64.0*	*50-131*			
LCS (1J53125-BS1)				Prepared: 10/31/05 Analyzed: 11/02/05						
TEH, as #2 diesel fuel	386.7	5	mg/kg	502.2		77.0	65-110			
Surrogate: Pentacosane	*2.11*		"	*2.58*		*81.8*	*50-131*			
Matrix Spike (1J53125-MS1)	**Source: 15J0975-01**			Prepared: 10/31/05 Analyzed: 11/02/05						
TEH, as #2 diesel fuel	307.9	5	mg/kg	500.7	ND	61.5	50-110			
Surrogate: Pentacosane	*1.95*		"	*2.57*		*75.9*	*50-131*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Extractable Petroleum Hydrocarbons - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J53125 - 3545 OA-2 PFE										
Matrix Spike Dup (1J53125-MSD1)	**Source: 15J0975-01**			Prepared: 10/31/05	Analyzed: 11/02/05					
TEH, as #2 diesel fuel	340.5	5	mg/kg	500.5	ND	68.0	50-110	10.1	30	
Surrogate: Pentacosane	*2.02*		"	*2.57*		*78.6*	*50-131*			
Reference (1J53125-SRM1)				Prepared: 10/31/05	Analyzed: 11/02/05					
TEH, as #2 diesel fuel	425.6	5	mg/kg	502.2		84.7	70-130			
Surrogate: Pentacosane	*2.27*		"	*2.58*		*88.0*	*50-131*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15K0315 - 1K50141										
Calibration Check (15K0315-CCV1)			Prepared & Analyzed: 11/02/05							
N-Nitrosodimethylamine	70.38		mg/kg wet	45.00		156	80-120			QS-02
Phenol	43.96		"	45.30		97.0	80-120			
Aniline	37.59		"	42.00		89.5	80-120			
Bis(2-Chloroethyl) Ether	41.86		"	45.00		93.0	80-120			
2-Chlorophenol	46.88		"	44.80		105	80-120			
1,3-Dichlorobenzene	45.12		"	45.00		100	80-120			
1,4-Dichlorobenzene	47.46		"	45.00		105	80-120			
Benzyl Alcohol	46.89		"	45.00		104	80-120			
1,2-Dichlorobenzene	42.72		"	45.50		93.9	80-120			
2-Methylphenol	51.14		"	45.40		113	80-120			
Bis(2-Chloroisopropyl) Ether	46.14		"	45.00		103	80-120			
n-Nitroso-di-n-propylamine	48.19		"	45.00		107	80-120			
(3 & 4)-Methylphenol	40.47		"	45.00		89.9	80-120			
Hexachloroethane	39.79		"	45.00		88.4	80-120			
Nitrobenzene	47.30		"	45.00		105	80-120			
Isophorone	47.25		"	45.00		105	80-120			
2-Nitrophenol	48.87		"	45.00		109	80-120			
2,4-Dimethylphenol	45.09		"	45.00		100	80-120			
Bis(2-Chloroethoxy) Methane	48.99		"	45.00		109	80-120			
2,4-Dichlorophenol	44.80		"	44.60		100	80-120			
1,2,4-Trichlorobenzene	43.11		"	45.00		95.8	80-120			
Naphthalene	44.82		"	42.00		107	80-120			
4-Chloroaniline	43.62		"	42.00		104	80-120			
Hexachlorobutadiene	47.34		"	45.00		105	80-120			
4-Chloro-3-methylphenol	47.76		"	45.00		106	80-120			
2-Methylnaphthalene	43.42		"	45.00		96.5	80-120			
Hexachlorocyclopentadiene	37.21		"	45.00		82.7	80-120			
2,4,6-Trichlorophenol	44.17		"	45.00		98.2	80-120			
2,4,5-Trichlorophenol	41.44		"	45.00		92.1	80-120			
2-Chloronaphthalene	43.13		"	45.00		95.8	80-120			
2-Nitroaniline	38.64		"	42.00		92.0	80-120			
Dimethylphthalate	43.28		"	45.00		96.2	80-120			
Acenaphthylene	39.89		"	42.00		95.0	80-120			
2,6-Dinitrotoluene	44.60		"	45.00		99.1	80-120			
3-Nitroaniline	42.28		"	42.00		101	80-120			
Acenaphthene	43.76		"	42.00		104	80-120			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15K0315 - 1K50141										
Calibration Check (15K0315-CCV1)				Prepared & Analyzed: 11/02/05						
2,4-Dinitrophenol	45.44		mg/kg wet	45.00		101	80-120			
Dibenzofuran	41.83		"	45.00		93.0	80-120			
2,4-Dinitrotoluene	42.04		"	45.00		93.4	80-120			
4-Nitrophenol	38.98		"	45.00		86.6	80-120			
Diethyl Phthalate	46.75		"	45.00		104	80-120			
Fluorene	40.78		"	42.00		97.1	80-120			
4-Chlorophenyl Phenyl Ether	42.72		"	45.00		94.9	80-120			
4-Nitroaniline	32.09		"	42.00		76.4	80-120			QR-06
4,6-Dinitro-2-methylphenol	49.47		"	45.00		110	80-120			
N-Nitrosodiphenylamine	47.07		"	45.00		105	80-120			
Azobenzene	39.30		"	42.00		93.6	80-120			
4-Bromophenyl Phenyl Ether	42.20		"	45.00		93.8	80-120			
Hexachlorobenzene	47.74		"	45.00		106	80-120			
Pentachlorophenol	47.01		"	45.00		104	80-120			
Phenanthrene	42.15		"	42.00		100	80-120			
Anthracene	47.44		"	42.00		113	80-120			
Di-n-butyl Phthalate	52.51		"	45.00		117	80-120			
Fluoranthene	37.01		"	42.00		88.1	80-120			
Benzidine	92.22		"	90.00		102	80-120			
Pyrene	41.70		"	42.00		99.3	80-120			
Butyl Benzyl Phthalate	56.74		"	45.00		126	80-120			QS-02
Benzo(a)anthracene	41.54		"	42.00		98.9	80-120			
Chrysene	41.65		"	42.00		99.2	80-120			
Bis(2-Ethylhexyl) Phthalate	59.02		"	45.00		131	80-120			QS-02
Di-n-octyl Phthalate	50.95		"	45.00		113	80-120			
Indeno(1,2,3-cd)Pyrene	38.33		"	42.00		91.3	80-120			
3,3'-Dichlorobenzidine	67.40		"	90.00		74.9	80-120			QR-06
Benzo(b)Fluoranthene	47.01		"	42.00		112	80-120			
Benzo(k)Fluoranthene	39.38		"	42.00		93.8	80-120			
Benzo(a)Pyrene	41.99		"	42.00		100	80-120			
Dibenzo(a,h)anthracene	42.50		"	42.00		101	80-120			
Benzo(g,h,i)perylene	44.58		"	42.00		106	80-120			
Surrogate: 2-Fluorophenol	*38.00*		"	*42.10*		*90.3*	*50-129*			
Surrogate: Phenol-d6	*43.42*		"	*42.40*		*102*	*50-132*			
Surrogate: Nitrobenzene-d5	*41.82*		"	*41.20*		*102*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*42.15*		"	*41.70*		*101*	*50-112*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15K0315 - 1K50141										
Calibration Check (15K0315-CCV1)				Prepared & Analyzed: 11/02/05						
Surrogate: 2,4,6-Tribromophenol	*38.47*		*mg/kg wet*	*41.80*		*92.0*	*54-140*			
Surrogate: Terphenyl-dl4	*46.71*		*"*	*41.30*		*113*	*50-124*			
Batch 1K50141 - 3545 BNA PFE										
Blank (1K50141-BLK1)				Prepared: 11/01/05 Analyzed: 11/02/05						
N-Nitrosodimethylamine	ND	0.33	mg/kg wet							
Phenol	ND	0.33	"							
Aniline	ND	0.33	"							
Bis(2-Chloroethyl) Ether	ND	0.33	"							
2-Chlorophenol	ND	0.33	"							
1,3-Dichlorobenzene	ND	0.33	"							
1,4-Dichlorobenzene	ND	0.33	"							
Benzyl Alcohol	ND	0.33	"							
1,2-Dichlorobenzene	ND	0.33	"							
2-Methylphenol	ND	0.33	"							
Bis(2-Chloroisopropyl) Ether	ND	0.33	"							
n-Nitroso-di-n-propylamine	ND	0.33	"							
(3 & 4)-Methylphenol	ND	0.33	"							
Hexachloroethane	ND	0.33	"							
Nitrobenzene	ND	0.33	"							
Isophorone	ND	0.33	"							
2-Nitrophenol	ND	0.33	"							
2,4-Dimethylphenol	ND	0.33	"							
Bis(2-Chloroethoxy) Methane	ND	0.33	"							
2,4-Dichlorophenol	ND	0.33	"							
1,2,4-Trichlorobenzene	ND	0.33	"							
Naphthalene	ND	0.33	"							
4-Chloroaniline	ND	0.33	"							
Hexachlorobutadiene	ND	0.33	"							
4-Chloro-3-methylphenol	ND	0.33	"							
2-Methylnaphthalene	ND	0.33	"							
Hexachlorocyclopentadiene	ND	0.33	"							
2,4,6-Trichlorophenol	ND	0.33	"							
2,4,5-Trichlorophenol	ND	1.65	"							
2-Chloronaphthalene	ND	0.33	"							
2-Nitroaniline	ND	1.65	"							

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K50141 - 3545 BNA PFE										
Blank (1K50141-BLK1)			Prepared: 11/01/05 Analyzed: 11/02/05							
Dimethylphthalate	ND	0.33	mg/kg wet							
Acenaphthylene	ND	0.33	"							
2,6-Dinitrotoluene	ND	0.33	"							
3-Nitroaniline	ND	1.65	"							
Acenaphthene	ND	0.33	"							
2,4-Dinitrophenol	ND	1.65	"							
Dibenzofuran	ND	0.33	"							
2,4-Dinitrotoluene	ND	0.33	"							
4-Nitrophenol	ND	0.66	"							
Diethyl Phthalate	ND	0.33	"							
Fluorene	ND	0.33	"							
4-Chlorophenyl Phenyl Ether	ND	0.33	"							
4-Nitroaniline	ND	0.66	"							
4,6-Dinitro-2-methylphenol	ND	1.65	"							
N-Nitrosodiphenylamine	ND	0.33	"							
Azobenzene	ND	0.33	"							
4-Bromophenyl Phenyl Ether	ND	0.33	"							
Hexachlorobenzene	ND	0.33	"							
Pentachlorophenol	ND	0.66	"							
Phenanthrene	ND	0.33	"							
Anthracene	ND	0.33	"							
Di-n-butyl Phthalate	ND	0.33	"							
Fluoranthene	ND	0.33	"							
Benzidine	ND	0.33	"							
Pyrene	ND	0.33	"							
Butyl Benzyl Phthalate	ND	0.33	"							
Benzo(a)anthracene	ND	0.33	"							
Chrysene	ND	0.33	"							
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"							
Di-n-octyl Phthalate	ND	0.33	"							
Indeno(1,2,3-cd)Pyrene	ND	0.33	"							
3,3'-Dichlorobenzidine	ND	0.66	"							
Benzo(b)Fluoranthene	ND	0.33	"							
Benzo(k)Fluoranthene	ND	0.33	"							
Benzo(a)Pyrene	ND	0.33	"							
Dibenzo(a,h)anthracene	ND	0.33	"							

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K50141 - 3545 BNA PFE										
Blank (1K50141-BLK1)				Prepared: 11/01/05 Analyzed: 11/02/05						
Benzo(g,h,i)perylene	ND	0.33	mg/kg wet							
Surrogate: 2-Fluorophenol	*1.866*		"	*3.000*		*62.2*	*50-129*			
Surrogate: Phenol-d6	*2.982*		"	*3.050*		*97.8*	*50-132*			
Surrogate: Nitrobenzene-d5	*2.048*		"	*3.000*		*68.3*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*2.816*		"	*3.050*		*92.3*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*3.130*		"	*3.050*		*103*	*54-140*			
Surrogate: Terphenyl-dl4	*3.716*		"	*3.017*		*123*	*50-124*			
LCS (1K50141-BS1)				Prepared: 11/01/05 Analyzed: 11/02/05						
Phenol	1.686	0.33	mg/kg wet	1.900		88.7	50-127			
2-Chlorophenol	1.922	0.33	"	2.073		92.7	50-110			
1,3-Dichlorobenzene	2.293	0.33	"	2.873		79.8	60-140			
1,4-Dichlorobenzene	1.736	0.33	"	2.357		73.7	50-110			
1,2-Dichlorobenzene	1.969	0.33	"	2.907		67.7	60-140			
2-Methylphenol	1.251	0.33	"	1.693		73.9	63-136			
n-Nitroso-di-n-propylamine	2.499	0.33	"	2.513		99.4	50-119			
(3 & 4)-Methylphenol	1.576	0.33	"	2.040		77.3	50-110			
Hexachloroethane	1.703	0.33	"	2.400		71.0	50-130			
Nitrobenzene	2.425	0.33	"	2.683		90.4	50-113			
2-Nitrophenol	1.604	0.33	"	1.867		85.9	50-125			
2,4-Dimethylphenol	1.533	0.33	"	2.027		75.6	60-140			
2,4-Dichlorophenol	1.754	0.33	"	2.260		77.6	60-140			
1,2,4-Trichlorobenzene	2.261	0.33	"	3.120		72.5	73-114			QS-01
Naphthalene	2.133	0.33	"	2.457		86.8	60-140			
Hexachlorobutadiene	2.007	0.33	"	2.783		72.1	60-140			
4-Chloro-3-methylphenol	1.659	0.33	"	1.980		83.8	58-122			
2,4,6-Trichlorophenol	2.460	0.33	"	2.787		88.3	79-125			
2,4,5-Trichlorophenol	1.670	1.65	"	2.000		83.5	60-140			
Dimethylphthalate	2.695	0.33	"	2.923		92.2	61-110			
Acenaphthylene	1.773	0.33	"	2.273		78.0	63-133			
2,6-Dinitrotoluene	1.937	0.33	"	2.437		79.5	50-121			
Acenaphthene	2.993	0.33	"	3.167		94.5	60-140			
2,4-Dinitrophenol	0.971	1.65	"	1.609		60.3	60-140			
2,4-Dinitrotoluene	2.574	0.33	"	2.570		100	60-140			
4-Nitrophenol	1.977	0.66	"	2.507		78.9	53-140			
Diethyl Phthalate	2.612	0.33	"	2.660		98.2	62-113			
Fluorene	2.104	0.33	"	2.357		89.3	50-138			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K50141 - 3545 BNA PFE										
LCS (1K50141-BS1)				Prepared: 11/01/05 Analyzed: 11/02/05						
4,6-Dinitro-2-methylphenol	1.394	1.65	mg/kg wet	1.787		78.0	51-138			
Hexachlorobenzene	2.416	0.33	"	2.400		101	60-140			
Pentachlorophenol	1.736	0.66	"	2.153		80.6	58-139			
Phenanthrene	2.498	0.33	"	2.437		103	71-112			
Anthracene	2.113	0.33	"	2.313		91.4	50-110			
Di-n-butyl Phthalate	2.811	0.33	"	2.680		105	50-139			
Fluoranthene	4.149	0.33	"	5.067		81.9	57-118			
Pyrene	3.321	0.33	"	3.323		99.9	50-110			
Butyl Benzyl Phthalate	2.855	0.33	"	2.790		102	60-140			
Chrysene	1.707	0.33	"	2.727		62.6	50-137			
Bis(2-Ethylhexyl) Phthalate	3.193	0.33	"	2.923		109	60-140			
Benzo(b)Fluoranthene	2.375	0.33	"	2.423		98.0	60-140			
Benzo(k)Fluoranthene	2.442	0.33	"	2.323		105	60-140			
Benzo(a)Pyrene	2.082	0.33	"	2.457		84.7	50-137			
Surrogate: 2-Fluorophenol	*2.110*		"	*3.000*		*70.3*	*50-129*			
Surrogate: Phenol-d6	*2.860*		"	*3.050*		*93.8*	*50-132*			
Surrogate: Nitrobenzene-d5	*2.502*		"	*3.000*		*83.4*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*2.911*		"	*3.050*		*95.4*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*3.210*		"	*3.050*		*105*	*54-140*			
Surrogate: Terphenyl-dl4	*3.064*		"	*3.017*		*102*	*50-124*			
Matrix Spike (1K50141-MS1)	**Source: 15J0975-02**			Prepared: 11/01/05 Analyzed: 11/02/05						
Phenol	2.243	0.33	mg/kg dry	2.315	ND	96.9	50-127			
2-Chlorophenol	2.315	0.33	"	2.526	ND	91.6	50-110			
1,3-Dichlorobenzene	2.668	0.33	"	3.501	ND	76.2	60-140			
1,4-Dichlorobenzene	1.972	0.33	"	2.871	ND	68.7	50-121			
1,2-Dichlorobenzene	2.283	0.33	"	3.541	ND	64.5	60-140			
2-Methylphenol	1.560	0.33	"	2.063	ND	75.6	63-136			
n-Nitroso-di-n-propylamine	3.275	0.33	"	3.062	ND	107	50-139			
(3 & 4)-Methylphenol	2.048	0.33	"	2.485	ND	82.4	50-110			
Hexachloroethane	2.121	0.33	"	2.924	ND	72.5	50-130			
Nitrobenzene	2.807	0.33	"	3.269	ND	85.9	50-132			
2-Nitrophenol	1.825	0.33	"	2.274	ND	80.3	50-125			
2,4-Dimethylphenol	1.101	0.33	"	2.469	ND	44.6	60-140			QM-07
2,4-Dichlorophenol	1.800	0.33	"	2.753	ND	65.4	60-140			
1,2,4-Trichlorobenzene	2.402	0.33	"	3.801	ND	63.2	54-115			
Naphthalene	2.254	0.33	"	2.993	ND	75.3	60-140			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K50141 - 3545 BNA PFE										
Matrix Spike (1K50141-MS1)	**Source: 15J0975-02**			Prepared: 11/01/05		Analyzed: 11/02/05				
Hexachlorobutadiene	2.110	0.33	mg/kg dry	3.391	ND	62.2	60-140			
4-Chloro-3-methylphenol	1.925	0.33	"	2.412	ND	79.8	58-122			
2,4,6-Trichlorophenol	2.842	0.33	"	3.395	ND	83.7	76-131			
2,4,5-Trichlorophenol	1.809	1.65	"	2.437	ND	74.2	60-140			
Dimethylphthalate	3.089	0.33	"	3.561	ND	86.7	63-128			
Acenaphthylene	2.167	0.33	"	2.770	ND	78.2	63-133			
2,6-Dinitrotoluene	2.613	0.33	"	2.969	ND	88.0	59-117			
Acenaphthene	3.689	0.33	"	3.858	ND	95.6	60-140			
2,4-Dinitrophenol	1.372	1.65	"	1.961	ND	70.0	60-140			
2,4-Dinitrotoluene	2.827	0.33	"	3.131	ND	90.3	60-140			
4-Nitrophenol	2.653	0.66	"	3.054	ND	86.9	53-140			
Diethyl Phthalate	2.945	0.33	"	3.241	ND	90.9	54-140			
Fluorene	2.718	0.33	"	2.871	ND	94.7	50-124			
4,6-Dinitro-2-methylphenol	1.920	1.65	"	2.177	ND	88.2	51-138			
Hexachlorobenzene	2.742	0.33	"	2.924	ND	93.8	60-140			
Pentachlorophenol	2.132	0.66	"	2.623	ND	81.3	58-139			
Phenanthrene	2.687	0.33	"	2.969	ND	90.5	65-138			
Anthracene	2.495	0.33	"	2.818	ND	88.5	50-136			
Di-n-butyl Phthalate	3.323	0.33	"	3.265	ND	102	50-139			
Fluoranthene	4.675	0.33	"	6.173	ND	75.7	50-118			
Pyrene	4.096	0.33	"	4.049	ND	101	50-124			
Butyl Benzyl Phthalate	3.566	0.33	"	3.399	ND	105	60-140			
Chrysene	2.045	0.33	"	3.322	ND	61.6	50-137			
Bis(2-Ethylhexyl) Phthalate	4.157	0.33	"	3.561	ND	117	60-140			
Benzo(b)Fluoranthene	2.826	0.33	"	2.952	ND	95.7	60-140			
Benzo(k)Fluoranthene	2.762	0.33	"	2.831	ND	97.6	60-140			
Benzo(a)Pyrene	2.565	0.33	"	2.993	ND	85.7	50-137			
Surrogate: 2-Fluorophenol	*2.611*		"	*3.655*		*71.4*	*50-129*			
Surrogate: Phenol-d6	*3.465*		"	*3.716*		*93.2*	*50-132*			
Surrogate: Nitrobenzene-d5	*3.069*		"	*3.655*		*84.0*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*3.007*		"	*3.716*		*80.9*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*3.525*		"	*3.716*		*94.9*	*54-140*			
Surrogate: Terphenyl-dl4	*3.451*		"	*3.675*		*93.9*	*50-124*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K50141 - 3545 BNA PFE										
Matrix Spike Dup (1K50141-MSD1)	**Source: 15J0975-02**			Prepared: 11/01/05 Analyzed: 11/02/05						
Phenol	2.453	0.33	mg/kg dry	2.317	ND	106	50-127	8.94	20	
2-Chlorophenol	2.295	0.33	"	2.528	ND	90.8	50-110	0.868	24	
1,3-Dichlorobenzene	2.501	0.33	"	3.504	ND	71.4	60-140	6.46	40	
1,4-Dichlorobenzene	1.728	0.33	"	2.874	ND	60.1	50-121	13.2	16	
1,2-Dichlorobenzene	2.379	0.33	"	3.545	ND	67.1	60-140	4.12	40	
2-Methylphenol	1.470	0.33	"	2.065	ND	71.2	63-136	5.94	22	
n-Nitroso-di-n-propylamine	3.584	0.33	"	3.065	ND	117	50-139	9.01	17	
(3 & 4)-Methylphenol	1.820	0.33	"	2.488	ND	73.2	50-110	11.8	29	
Hexachloroethane	1.951	0.33	"	2.927	ND	66.7	50-130	8.35	20	
Nitrobenzene	2.701	0.33	"	3.272	ND	82.5	50-132	3.85	19	
2-Nitrophenol	1.912	0.33	"	2.276	ND	84.0	50-125	4.66	24	
2,4-Dimethylphenol	0.791	0.33	"	2.472	ND	32.0	60-140	32.8	40	QM-07
2,4-Dichlorophenol	1.933	0.33	"	2.756	ND	70.1	60-140	7.13	40	
1,2,4-Trichlorobenzene	2.439	0.33	"	3.805	ND	64.1	54-115	1.53	20	
Naphthalene	2.175	0.33	"	2.996	ND	72.6	60-140	3.57	40	
Hexachlorobutadiene	2.014	0.33	"	3.394	ND	59.3	60-140	4.66	40	QM-07
4-Chloro-3-methylphenol	2.139	0.33	"	2.415	ND	88.6	58-122	10.5	24	
2,4,6-Trichlorophenol	2.915	0.33	"	3.398	ND	85.8	76-131	2.54	15	
2,4,5-Trichlorophenol	2.023	1.65	"	2.439	ND	82.9	60-140	11.2	40	
Dimethylphthalate	3.086	0.33	"	3.565	ND	86.6	63-128	0.0972	24	
Acenaphthylene	2.176	0.33	"	2.772	ND	78.5	63-133	0.414	26	
2,6-Dinitrotoluene	2.614	0.33	"	2.972	ND	88.0	59-117	0.0383	28	
Acenaphthene	3.530	0.33	"	3.862	ND	91.4	60-140	4.41	10.1	
2,4-Dinitrophenol	1.907	1.65	"	1.963	ND	97.1	60-140	32.6	40	
2,4-Dinitrotoluene	3.022	0.33	"	3.134	ND	96.4	60-140	6.67	40	
4-Nitrophenol	3.293	0.66	"	3.057	ND	108	53-140	21.5	20	QR-02
Diethyl Phthalate	2.930	0.33	"	3.244	ND	90.3	54-140	0.511	28	
Fluorene	2.585	0.33	"	2.874	ND	89.9	50-124	5.02	30	
4,6-Dinitro-2-methylphenol	2.117	1.65	"	2.179	ND	97.2	51-138	9.76	22	
Hexachlorobenzene	2.850	0.33	"	2.927	ND	97.4	60-140	3.86	40	
Pentachlorophenol	2.397	0.66	"	2.626	ND	91.3	58-139	11.7	30	
Phenanthrene	2.629	0.33	"	2.972	ND	88.5	65-138	2.18	22	
Anthracene	2.469	0.33	"	2.821	ND	87.5	50-136	1.05	30	
Di-n-butyl Phthalate	3.049	0.33	"	3.268	ND	93.3	50-139	8.60	22	
Fluoranthene	4.668	0.33	"	6.179	ND	75.5	50-118	0.150	24	
Pyrene	3.551	0.33	"	4.053	ND	87.6	50-124	14.3	30	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K50141 - 3545 BNA PFE										
Matrix Spike Dup (1K50141-MSD1)	**Source: 15J0975-02**			Prepared: 11/01/05 Analyzed: 11/02/05						
Butyl Benzyl Phthalate	2.902	0.33	mg/kg dry	3.402	ND	85.3	60-140	20.5	40	
Chrysene	1.951	0.33	"	3.325	ND	58.7	50-137	4.70	30	
Bis(2-Ethylhexyl) Phthalate	3.599	0.33	"	3.565	ND	101	60-140	14.4	40	
Benzo(b)Fluoranthene	2.559	0.33	"	2.955	ND	86.6	60-140	9.92	40	
Benzo(k)Fluoranthene	2.677	0.33	"	2.833	ND	94.5	60-140	3.13	40	
Benzo(a)Pyrene	2.307	0.33	"	2.996	ND	77.0	50-137	10.6	30	
Surrogate: 2-Fluorophenol	*2.492*		"	*3.659*		*68.1*	*50-129*			
Surrogate: Phenol-d6	*3.897*		"	*3.720*		*105*	*50-132*			
Surrogate: Nitrobenzene-d5	*2.921*		"	*3.659*		*79.8*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*2.702*		"	*3.720*		*72.6*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*3.338*		"	*3.720*		*89.7*	*54-140*			
Surrogate: Terphenyl-dl4	*2.844*		"	*3.679*		*77.3*	*50-124*			
Reference (1K50141-SRM1)				Prepared: 11/01/05 Analyzed: 11/03/05						
Phenol	1.971	0.33	mg/kg wet	1.900		104	70-130			
2-Chlorophenol	2.131	0.33	"	2.073		103	70-130			
1,3-Dichlorobenzene	2.339	0.33	"	2.873		81.4	70-130			
1,4-Dichlorobenzene	2.153	0.33	"	2.357		91.3	70-130			
1,2-Dichlorobenzene	3.752	0.33	"	2.907		129	70-130			
2-Methylphenol	2.031	0.33	"	1.693		120	70-130			
n-Nitroso-di-n-propylamine	3.282	0.33	"	2.513		131	70-130			QR-05
(3 & 4)-Methylphenol	1.765	0.33	"	2.040		86.5	70-130			
Hexachloroethane	2.656	0.33	"	2.400		111	70-130			
Nitrobenzene	1.978	0.33	"	2.683		73.7	70-130			
2-Nitrophenol	1.818	0.33	"	1.867		97.4	70-130			
2,4-Dimethylphenol	1.732	0.33	"	2.027		85.4	70-130			
2,4-Dichlorophenol	1.739	0.33	"	2.260		76.9	70-130			
1,2,4-Trichlorobenzene	2.353	0.33	"	3.120		75.4	70-130			
Naphthalene	1.671	0.33	"	2.457		68.0	70-130			QR-05
Hexachlorobutadiene	2.044	0.33	"	2.783		73.4	70-130			
4-Chloro-3-methylphenol	1.799	0.33	"	1.980		90.9	70-130			
2,4,6-Trichlorophenol	2.303	0.33	"	2.787		82.6	70-130			
2,4,5-Trichlorophenol	1.685	1.65	"	2.000		84.2	70-130			
Dimethylphthalate	2.660	0.33	"	2.923		91.0	70-130			
Acenaphthylene	1.740	0.33	"	2.273		76.6	70-130			
2,6-Dinitrotoluene	2.146	0.33	"	2.437		88.1	70-130			
Acenaphthene	2.788	0.33	"	3.167		88.0	70-130			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K50141 - 3545 BNA PFE										
Reference (1K50141-SRM1)				Prepared: 11/01/05 Analyzed: 11/03/05						
2,4-Dinitrophenol	1.826	1.65	mg/kg wet	1.610		113	70-130			
2,4-Dinitrotoluene	2.336	0.33	"	2.570		90.9	70-130			
4-Nitrophenol	2.239	0.66	"	2.507		89.3	70-130			
Diethyl Phthalate	2.375	0.33	"	2.660		89.3	70-130			
Fluorene	2.225	0.33	"	2.357		94.4	70-130			
4,6-Dinitro-2-methylphenol	1.473	1.65	"	1.787		82.4	70-130			
Hexachlorobenzene	1.855	0.33	"	2.400		77.3	70-130			
Pentachlorophenol	1.984	0.66	"	2.153		92.2	70-130			
Phenanthrene	2.084	0.33	"	2.437		85.5	70-130			
Anthracene	1.960	0.33	"	2.313		84.7	70-130			
Di-n-butyl Phthalate	2.083	0.33	"	2.680		77.7	70-130			
Fluoranthene	3.495	0.33	"	5.067		69.0	70-130			QR-05
Pyrene	3.083	0.33	"	3.323		92.8	70-130			
Butyl Benzyl Phthalate	2.501	0.33	"	2.790		89.6	70-130			
Chrysene	1.695	0.33	"	2.727		62.2	70-130			QR-05
Bis(2-Ethylhexyl) Phthalate	2.929	0.33	"	2.923		100	70-130			
Benzo(b)Fluoranthene	2.456	0.33	"	2.423		101	70-130			
Benzo(k)Fluoranthene	2.138	0.33	"	2.323		92.0	70-130			
Benzo(a)Pyrene	2.066	0.33	"	2.457		84.1	70-130			
Surrogate: 2-Fluorophenol	*2.757*		"	*3.000*		*91.9*	*50-129*			
Surrogate: Phenol-d6	*3.785*		"	*3.050*		*124*	*50-132*			
Surrogate: Nitrobenzene-d5	*2.645*		"	*3.000*		*88.2*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*2.384*		"	*3.050*		*78.2*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*3.200*		"	*3.050*		*105*	*54-140*			
Surrogate: Terphenyl-dl4	*2.579*		"	*3.017*		*85.5*	*50-124*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Determination of Physical/Conventional Chemistry Parameters - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J52644 - Wet Chem Preparation										
Duplicate (1J52644-DUP1)		**Source: 15J1086-12**		Prepared: 10/26/05 Analyzed: 10/27/05						
% Solids	84.0	0.1	%		83.6			0.477	20	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	11/09/05 13:33

Notes and Definitions

S-BN	Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
QS-02	The spike recovery for this QC sample exceeded established acceptance limits. However, all samples were below the reporting and/or regulatory limit so the data is acceptable.
QS-01	The blank spike recovery was outside acceptance limits. Batch accepted based on acceptable MS/MSD/RPD results.
QR-06	The reference standard was outside of established control limits.
QR-05	The reference standard was outside of established control limits. The batch was accepted based on acceptable LCS, MS/MSD and RPD results.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
D-06	The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

WORK ORDER

Printed: 10/24/2005 2:07:38PM

15J0975

Keystone Laboratories, Inc. - Newton

Client: Montgomery Watson Harza-IA	**Project Manager:** Jeffrey King, Ph.D.
Project: Jefferson Barracks ANG	**Project Number:** DAHA-A0066-84322-OF

Report To:
Montgomery Watson Harza-IA
Adam Newman
11153 Aurora Avenue
Des Moines, IA 50322
Phone: 515-253-0830
Fax: 515-253-9592

Invoice To:
Montgomery Watson Harza-IA
Adam Newman
11153 Aurora Avenue
Des Moines, IA 50322
Phone :515-253-0830
Fax: 515-253-9592

Date Due:	11/04/05 17:00 (10 day TAT)		
Received By:	Bill Jenkins	Date Received:	10/21/05 11:15
Logged In By:	Marlene Main	Date Logged In:	10/21/05 14:51

Samples Received at	5.6°C		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confin	Yes		

Analysis	Due	TAT	Expires	Comments
15J0975-01 Site 2-SB9 6-8' [Soil] Sampled 10/20/05 09:25 Central				
oa2-missouri	11/04/05 17:00	10	11/03/05 09:25	
15J0975-02 Site 2-SB10 3-4' [Soil] Sampled 10/20/05 09:50 Central				
8270-100	11/04/05 17:00	10	11/03/05 09:50	MS/MSD
solids-dry-weight	11/04/05 17:00	10	04/18/06 09:50	MS/MSD
15J0975-03 Site 2-SB11 3-4' [Soil] Sampled 10/20/05 10:08 Central				
8270-100	11/04/05 17:00	10	11/03/05 10:08	
solids-dry-weight	11/04/05 17:00	10	04/18/06 10:08	
15J0975-04 Site 2-SB12 3-4' [Soil] Sampled 10/20/05 10:25 Central				
8270-100	11/04/05 17:00	10	11/03/05 10:25	
solids-dry-weight	11/04/05 17:00	10	04/18/06 10:25	
15J0975-05 Site 2-SB13 3-4' [Soil] Sampled 10/20/05 10:45 Central				
solids-dry-weight	11/04/05 17:00	10	04/18/06 10:45	
8270-100	11/04/05 17:00	10	11/03/05 10:45	
15J0975-06 Site 2-SB14 3-4' [Soil] Sampled 10/20/05 11:00 Central				
solids-dry-weight	11/04/05 17:00	10	04/18/06 11:00	
8270-100	11/04/05 17:00	10	11/03/05 11:00	

15J0975

Keystone Laboratories, Inc. - Newton

Client:	**Montgomery Watson Harza-IA**	**Project Manager:**	**Jeffrey King, Ph.D.**
Project:	**Jefferson Barracks ANG**	**Project Number:**	**DAHA-A0066-84322-OF**

Analysis	Due	TAT	Expires	Comments
15J0975-07 Site 2-SB15 3-4' [Soil] Sampled 10/20/05 11:15 Central				
8270-100	11/04/05 17:00	10	11/03/05 11:15	
solids-dry-weight	11/04/05 17:00	10	04/18/06 11:15	
15J0975-08 Site 2-SB16 3-4' [Soil] Sampled 10/20/05 11:30 Central				
8270-100	11/04/05 17:00	10	11/03/05 11:30	
solids-dry-weight	11/04/05 17:00	10	04/18/06 11:30	
15J0975-09 Site 2-Dup-1 [Soil] Sampled 10/20/05 00:00 Central				
oa2-missouri	11/04/05 17:00	10	11/03/05 00:00	
15J0975-10 Site 2-Dup-2 [Soil] Sampled 10/20/05 00:00 Central				
solids-dry-weight	11/04/05 17:00	10	04/18/06 00:00	
8270-100	11/04/05 17:00	10	11/03/05 00:00	

Reviewed By

Date

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

☒ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

☐ 3012 Ansborough Ave.
Waterloo, IA 50701
Phone: 319-235-4440
Fax: 319-235-2480
www.keystonelabs.com

☐ 1304 Adams
Kansas City, KS 66103
Phone: 913-321-7856
Fax: 913-321-7937

PRINT OR TYPE INFORMATION BELOW

SAMPLER: Adam R. Newman
SITE NAME: Jefferson Barracks Air National Guard Station (JBANGS)
ADDRESS:
CITY/ST/ZIP: St. Louis, MO
PHONE:

REPORT TO:
NAME: Adam R. Newman
COMPANY NAME: MWH
ADDRESS: 11153 Aurora Ave
CITY/ST/ZIP: Des Moines, IA 50322-7904
PHONE: 515-253-0830
FAX: 515-253-9592

BILL TO:
NAME: Adam R. Newman
COMPANY NAME: MWH
ADDRESS: 11153 Aurora
CITY/ST/ZIP: Des Moines, IA 50322-7904
PHONE: 515-253-0850

Keystone Quote No.: Jefferson Barracks (If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED: TEH (OA-2)	ANALYSES REQUIRED: SVOCs (8270)	ANALYSES REQUIRED: ALW 10/20/05	LAB USE ONLY: LABORATORY SAMPLE NUMBER
Site2-SB9-6-8'	10/20/05	09:25	ERP Site 2	1	soil	G	X	-		01
Site2-SB10-3-4'	10/20/05	09:50	ERP Site 2 (MS/MSD)	2	soil	G	X	X		02
Site2-SB11-3-4'	10/20/05	10:08	ERP Site 2	1	soil	G	-	X		03
Site2-SB12-3-4'	10/20/05	10:25	ERP Site 2	1	soil	G	-	X		04
Site2-SB13-3-4'	10/20/05	10:45	ERP Site 2	1	soil	G	-	X		05
Site2-SB14-3-4'	10/20/05	11:00	ERP Site 2	1	soil	G	-	X		06
Site2-SB15-3-4'	10/20/05	11:15	ERP Site 2	1	soil	G	-	X		07
Site2-SB16-3-4'	10/20/05	11:30	ERP Site 2	1	soil	G	-	X		08
Site2-Dup1-	10/20/05	—	ERP Site 2	1	soil	G	X	-		09
Site2-Dup2	10/20/05	—	ERP Site 2	1	soil	G	-	X		10

LABORATORY WORK ORDER NO.: 15J0975

SAMPLE TEMPERATURE UPON RECEIPT: °C

SAMPLE CONDITION/COMMENTS:

Relinquished by: (Signature)	Date 10/21/05 Time 10:25	Received by: (Signature)	Date Time	Turn-Around: ☒ Standard ☐ Rush ____ Contact Lab Prior to Submission	
Relinquished by: (Signature)	Date Time	Received for Lab by: (Signature)	Date 10/21/05 Time 11:15 AM	Remarks: MS/MSD on sample no. Site2-SB10-3-4'	

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

FORM: CCR 7-97

Cooler # Rad.

Keystone Laboratories, Inc. Cooler/ Sample Receipt Form

Client: MWH **Work Order:** 15J0975 **Date Received:** 10/21/05 **Initials:** JNK

Delivered By: UPS/ FedX/ AirBrn Pry Exp/ Mail/ Walk-in/ Courier / Other:_____ **Air Bill Number:**_____

Type of packing material: Bubble/ Foam/ Paper/ Peanuts/ Vermiculite/ NA/ Other_____

Custody Seal: ❑ Present ☒ Absent ❑ Broken Seal No. _____ **COC signed and dated:** Yes / No

Samples cooled by: Ice/Ice Packs/ NA/ Other_____ **Cooler Temperature (includes correction factor):** 5.6 °C

Sample Receipt Discrepancies: ☒ No ❑ Yes (if Yes, see detail below)

❑ Chain of Custody not present ❑ Information obtained from PO/ letter received with samples	❑ Broken or leaking containers: _____
❑ Container Problems: ❑ Label Absent ❑ Incorrect Containers for tests indicated ❑ Insufficient amount of sample for tests indicated	❑ Sample listed on COC not received:
❑ COC incomplete ❑ COC missing time sampled, time obtained from sample container. ❑ COC missing date sampled, date obtained from sample container ❑ Sample excluded from COC: _____	❑ Air bubbles in VOA vials: _____ ❑ Sample description on container label different from COC: _____

Detailed Description/comments: _____

Client contacted regarding cooler/sample receipt conditions: Yes / No Contacted by JNK Date/Time 10/24/05

Who was contacted: Adam Newman Remarks: Sent e-mail.

Revision 1, 8/03
Keystone Laboratories, Inc.

Keystone
LABORATORIES, INC.

MEMBER ACIL

20 December 2005

RECEIVED
DEC 21 2005
MW / IOWA

Adam Newman
Montgomery Watson Harza-IA
11153 Aurora Avenue
Des Moines, IA 50322

RE: Jefferson Barracks ANG
DAHA-A0066-84322-OF

Enclosed are the results of analyses for samples received by the laboratory on 11/30/05 08:05. If you have any questions concerning this report, please feel free to contact me at 1-800-858-5227.

Sincerely,

Jeffrey King, Ph.D.
Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Keystone LABORATORIES, INC.

MEMBER ACIL

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EXA-SW-North 9'	15K1139-01	Soil	11/29/05 09:40	11/30/05 08:05
EXA-SW-East 9'	15K1139-02	Soil	11/29/05 09:45	11/30/05 08:05
EXA-SW-West 9'	15K1139-03	Soil	11/29/05 09:50	11/30/05 08:05
EXA-SW-South 9'	15K1139-04	Soil	11/29/05 10:00	11/30/05 08:05
EXA-FL-12'	15K1139-05	Soil	11/29/05 10:05	11/30/05 08:05
EXB1-SW-North 3'	15K1139-06	Soil	11/29/05 10:55	11/30/05 08:05
EXB1-SW-East 3'	15K1139-07	Soil	11/29/05 10:45	11/30/05 08:05
EXB1-SW-West 3'	15K1139-08	Soil	11/29/05 10:40	11/30/05 08:05
EXB1-SW-South 3'	15K1139-09	Soil	11/29/05 11:00	11/30/05 08:05
EXB1-FL-6'	15K1139-10	Soil	11/29/05 10:50	11/30/05 08:05
EXB2-SW-North 3'	15K1139-11	Soil	11/29/05 12:10	11/30/05 08:05
EXB2-SW-East 3'	15K1139-12	Soil	11/29/05 12:45	11/30/05 08:05
EXB2-SW-West 3'	15K1139-13	Soil	11/29/05 12:55	11/30/05 08:05
EXB2-SW-South 3'	15K1139-14	Soil	11/29/05 12:35	11/30/05 08:05
EXB2-FL-6'	15K1139-15	Soil	11/29/05 12:50	11/30/05 08:05
Dup-1	15K1139-16	Soil	11/29/05 00:00	11/30/05 08:05
Dup-2	15K1139-17	Soil	11/29/05 00:00	11/30/05 08:05

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXA-SW-North 9'
15K1139-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1K53019	11/30/05	12/01/05	Iowa OA-2	
TEH, as mineral spirits	**19**	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	ND	5	"	"	"	"	"	"	
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	ND	5	"	"	"	"	"	"	
TEH, as waste oil	**57**	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	**75**	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*54.5 %*	*50-131*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXA-SW-East 9'
15K1139-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1K53019	11/30/05	12/01/05	Iowa OA-2	
TEH, as mineral spirits	**6**	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	ND	5	"	"	"	"	"	"	
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	ND	5	"	"	"	"	"	"	
TEH, as waste oil	**141**	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	**147**	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*94.6 %*	*50-131*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXA-SW-West 9'
15K1139-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1K53019	11/30/05	12/01/05	Iowa OA-2	
TEH, as mineral spirits	ND	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	ND	5	"	"	"	"	"	"	
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	ND	5	"	"	"	"	"	"	
TEH, as waste oil	ND	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	ND	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*86.5 %*	*50-131*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXA-SW-South 9'
15K1139-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1K53019	11/30/05	12/01/05	Iowa OA-2	
TEH, as mineral spirits	**14**	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	ND	5	"	"	"	"	"	"	
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	ND	5	"	"	"	"	"	"	
TEH, as waste oil	**20**	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	**34**	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*97.3 %*	*50-131*		"	"	"	"	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXA-FL-12'
15K1139-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1K53019	11/30/05	12/01/05	Iowa OA-2	
TEH, as mineral spirits	ND	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	ND	5	"	"	"	"	"	"	
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	ND	5	"	"	"	"	"	"	
TEH, as waste oil	9	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	9	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*94.5 %*	*50-131*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-North 3'
15K1139-06 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-North 3'
15K1139-06 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*53.4 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*91.8 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*87.2 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*101 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-North 3'
15K1139-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*198 %*	*54-140*		*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*95.2 %*	*50-124*		*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**79.7**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-East 3'
15K1139-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-East 3'
15K1139-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*58.4 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*87.7 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*87.3 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*90.7 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-East 3'
15K1139-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*163 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*90.6 %*		*50-124*	"	"	"	"	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**79.6**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-West 3'
15K1139-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-West 3'
15K1139-08 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*49.0 %*	*50-129*		"	"	"	"	*S-07*
Surrogate: Phenol-d6		*76.3 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*78.4 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*84.0 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-West 3'
15K1139-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*145 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*76.3 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**79.8**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-South 3'
15K1139-09 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-South 3'
15K1139-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*55.9 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*98.2 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*101 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*107 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-SW-South 3'
15K1139-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*176 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*105 %*		*50-124*	"	"	"	"	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**79.3**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-FL-6'
15K1139-10 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-FL-6'
15K1139-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*52.6 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*90.3 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*88.6 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*96.9 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB1-FL-6'
15K1139-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*151 %*	*54-140*		*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*96.0 %*	*50-124*		*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**85.2**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-North 3'
15K1139-11 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-North 3'
15K1139-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*48.9 %*	*50-129*		"	"	"	"	*S-07*
Surrogate: Phenol-d6		*88.0 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*73.6 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*90.9 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-North 3'
15K1139-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*143 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*86.1 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**80.7**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-East 3'
15K1139-12 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-East 3'
15K1139-12 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*44.8 %*	*50-129*		"	"	"	"	*S-07*
Surrogate: Phenol-d6		*83.6 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*88.4 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*96.3 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-East 3'
15K1139-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*149 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*88.4 %*		*50-124*	"	"	"	"	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**82.0**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-West 3'
15K1139-13 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-West 3'
15K1139-13 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*49.2 %*	*50-129*		"	"	"	"	*S-07*
Surrogate: Phenol-d6		*94.0 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*79.1 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*87.4 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-West 3'
15K1139-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*139 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*90.8 %*		*50-124*	"	"	"	"	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**82.2**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-South 3'
15K1139-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-South 3'
15K1139-14 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*37.6 %*	*50-129*		"	"	"	"	*S-07*
Surrogate: Phenol-d6		*81.5 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*88.6 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*98.8 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-SW-South 3'
15K1139-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*134 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*96.8 %*		*50-124*	"	"	"	"	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**84.0**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-FL-6'
15K1139-15 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-FL-6'
15K1139-15 (Soil)

Keystone Laboratories, Inc. - Newton

Determination of Base/Neutral/Acid Extractable Compounds

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	11/30/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*50.5 %*	*50-129*		"	"	"	"	
Surrogate: Phenol-d6		*90.9 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*80.5 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*84.4 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

EXB2-FL-6'
15K1139-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*142 %*		*54-140*	*1K53018*	*11/30/05*	*11/30/05*	*EPA 8270C*	*S-07*
Surrogate: Terphenyl-dl4		*93.9 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**83.0**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Dup-1
15K1139-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Extractable Petroleum Hydrocarbons									
TEH, as kerosene	ND	5	mg/kg	1	1K53019	11/30/05	12/01/05	Iowa OA-2	
TEH, as mineral spirits	ND	5	"	"	"	"	"	"	
TEH, as hydraulic fluid	ND	5	"	"	"	"	"	"	
TEH, as gasoline	ND	5	"	"	"	"	"	"	
TEH, as #2 diesel fuel	**5**	5	"	"	"	"	"	"	
TEH, as waste oil	ND	5	"	"	"	"	"	"	
Total Extractable Hydrocarbons	**5**	5	"	"	"	"	"	"	
Surrogate: Pentacosane		*98.0 %*	*50-131*		"	"	"	"	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Dup-2
15K1139-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
N-Nitrosodimethylamine	ND	0.33	mg/kg dry	1	1K53018	11/30/05	12/01/05	EPA 8270C	
Phenol	ND	0.33	"	"	"	"	"	"	
Aniline	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethyl) Ether	ND	0.33	"	"	"	"	"	"	
2-Chlorophenol	ND	0.33	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
Benzyl Alcohol	ND	0.33	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.33	"	"	"	"	"	"	
2-Methylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroisopropyl) Ether	ND	0.33	"	"	"	"	"	"	
n-Nitroso-di-n-propylamine	ND	0.33	"	"	"	"	"	"	
(3 & 4)-Methylphenol	ND	0.33	"	"	"	"	"	"	
Hexachloroethane	ND	0.33	"	"	"	"	"	"	
Nitrobenzene	ND	0.33	"	"	"	"	"	"	
Isophorone	ND	0.33	"	"	"	"	"	"	
2-Nitrophenol	ND	0.33	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	0.33	"	"	"	"	"	"	
Bis(2-Chloroethoxy) Methane	ND	0.33	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.33	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
4-Chloroaniline	ND	0.33	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.33	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.33	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.33	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.65	"	"	"	"	"	"	
2-Chloronaphthalene	ND	0.33	"	"	"	"	"	"	
Dimethylphthalate	ND	0.33	"	"	"	"	"	"	
2-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
3-Nitroaniline	ND	1.65	"	"	"	"	"	"	
Acenaphthene	ND	0.33	"	"	"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Dup-2
15K1139-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
2,4-Dinitrophenol	ND	1.65	mg/kg dry	1	1K53018	11/30/05	12/01/05	EPA 8270C	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.33	"	"	"	"	"	"	
4-Nitrophenol	ND	0.66	"	"	"	"	"	"	
Diethyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
4-Chlorophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
4-Nitroaniline	ND	0.66	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.65	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	0.33	"	"	"	"	"	"	
Azobenzene	ND	0.33	"	"	"	"	"	"	
4-Bromophenyl Phenyl Ether	ND	0.33	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.33	"	"	"	"	"	"	
Pentachlorophenol	ND	0.66	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Di-n-butyl Phthalate	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzidine	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	
Butyl Benzyl Phthalate	ND	0.33	"	"	"	"	"	"	
Benzo(a)anthracene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"	"	"	"	"	"	
Di-n-octyl Phthalate	ND	0.33	"	"	"	"	"	"	
Indeno(1,2,3-cd)Pyrene	ND	0.33	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	0.66	"	"	"	"	"	"	
Benzo(b)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(k)Fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo(a)Pyrene	ND	0.33	"	"	"	"	"	"	
Dibenzo(a,h)anthracene	ND	0.33	"	"	"	"	"	"	
Benzo(g,h,i)perylene	ND	0.33	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*45.0 %*	*50-129*		"	"	"	"	*S-07*
Surrogate: Phenol-d6		*92.1 %*	*50-132*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*78.3 %*	*50-110*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*88.3 %*	*50-112*		"	"	"	"	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Dup-2
15K1139-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Base/Neutral/Acid Extractable Compounds									
Surrogate: 2,4,6-Tribromophenol		*113 %*		*54-140*	*1K53018*	*11/30/05*	*12/01/05*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*89.2 %*		*50-124*	*"*	*"*	*"*	*"*	
Determination of Physical/Conventional Chemistry Parameters									
% Solids	**80.3**	0.1	%	1	1L50101	11/30/05	11/30/05	% calculation	

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Extractable Petroleum Hydrocarbons - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15L0116 - 1K53019										
Calibration Check (15L0116-CCV1)				Prepared & Analyzed: 11/30/05						
TEH, as kerosene	1825		mg/kg	2030		89.9	85-115			
TEH, as mineral spirits	2216		"	2020		110	85-115			
TEH, as hydraulic fluid	2114		"	2020		105	85-115			
TEH, as gasoline	2241		"	2010		111	85-115			
TEH, as #2 diesel fuel	2035		"	2000		102	85-115			
TEH, as waste oil	2095		"	2030		103	85-115			
Surrogate: Pentacosane	*48.4*		"	*52.6*		*92.0*	*50-131*			
Batch 1K53019 - 3550B OA-2 Sonic										
Blank (1K53019-BLK1)				Prepared & Analyzed: 11/30/05						
TEH, as kerosene	ND	5	mg/kg							
TEH, as mineral spirits	ND	5	"							
TEH, as hydraulic fluid	ND	5	"							
TEH, as gasoline	ND	5	"							
TEH, as #2 diesel fuel	ND	5	"							
TEH, as waste oil	ND	5	"							
Total Extractable Hydrocarbons	ND	5	"							
Surrogate: Pentacosane	*2.29*		"	*2.58*		*88.8*	*50-131*			
LCS (1K53019-BS1)				Prepared: 11/30/05 Analyzed: 12/01/05						
TEH, as #2 diesel fuel	433.9	5	mg/kg	501.5		86.5	65-110			
Surrogate: Pentacosane	*2.36*		"	*2.58*		*91.5*	*50-131*			
Matrix Spike (1K53019-MS1)	**Source: 15K1139-01**			Prepared: 11/30/05 Analyzed: 12/01/05						
TEH, as #2 diesel fuel	403.4	5	mg/kg	500.7	ND	80.6	50-110			
Surrogate: Pentacosane	*2.47*		"	*2.57*		*96.1*	*50-131*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Extractable Petroleum Hydrocarbons - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53019 - 3550B OA-2 Sonic										
Matrix Spike Dup (1K53019-MSD1)	**Source: 15K1139-01**			Prepared: 11/30/05		Analyzed: 12/01/05				
TEH, as #2 diesel fuel	418.3	5	mg/kg	501.2	ND	83.5	50-110	3.63	30	
Surrogate: Pentacosane	*2.38*		"	*2.57*		*92.6*	*50-131*			
Reference (1K53019-SRM1)				Prepared: 11/30/05		Analyzed: 12/01/05				
TEH, as #2 diesel fuel	470.7	5	mg/kg	501.5		93.9	70-130			
Surrogate: Pentacosane	*2.36*		"	*2.58*		*91.5*	*50-131*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15L0105 - 1K53018										
Calibration Check (15L0105-CCV1)			Prepared & Analyzed: 11/30/05							
N-Nitrosodimethylamine	34.89		mg/kg wet	45.00		77.5	80-120			QR-06
Phenol	40.10		"	45.30		88.5	80-120			
Aniline	43.68		"	42.00		104	80-120			
Bis(2-Chloroethyl) Ether	37.90		"	45.00		84.2	80-120			
2-Chlorophenol	50.46		"	44.80		113	80-120			
1,3-Dichlorobenzene	41.12		"	45.00		91.4	80-120			
1,4-Dichlorobenzene	51.65		"	45.00		115	80-120			
Benzyl Alcohol	47.79		"	45.00		106	80-120			
1,2-Dichlorobenzene	43.70		"	45.50		96.0	80-120			
2-Methylphenol	51.39		"	45.40		113	80-120			
Bis(2-Chloroisopropyl) Ether	41.56		"	45.00		92.4	80-120			
n-Nitroso-di-n-propylamine	45.12		"	45.00		100	80-120			
(3 & 4)-Methylphenol	33.61		"	45.00		74.7	80-120			QR-05
Hexachloroethane	42.73		"	45.00		95.0	80-120			
Nitrobenzene	51.14		"	45.00		114	80-120			
Isophorone	45.33		"	45.00		101	80-120			
2-Nitrophenol	37.35		"	45.00		83.0	80-120			
2,4-Dimethylphenol	44.73		"	45.00		99.4	80-120			
Bis(2-Chloroethoxy) Methane	41.17		"	45.00		91.5	80-120			
2,4-Dichlorophenol	46.81		"	44.60		105	80-120			
1,2,4-Trichlorobenzene	51.29		"	45.00		114	80-120			
Naphthalene	45.68		"	42.00		109	80-120			
4-Chloroaniline	40.25		"	42.00		95.8	80-120			
Hexachlorobutadiene	63.97		"	45.00		142	80-120			QS-02
4-Chloro-3-methylphenol	43.46		"	45.00		96.6	80-120			
2-Methylnaphthalene	50.04		"	45.00		111	80-120			
Hexachlorocyclopentadiene	30.61		"	45.00		68.0	80-120			QR-06
2,4,6-Trichlorophenol	47.98		"	45.00		107	80-120			
2,4,5-Trichlorophenol	46.69		"	45.00		104	80-120			
2-Chloronaphthalene	42.52		"	45.00		94.5	80-120			
Dimethylphthalate	44.66		"	45.00		99.2	80-120			
2-Nitroaniline	31.79		"	42.00		75.7	80-120			QR-06
Acenaphthylene	39.73		"	42.00		94.6	80-120			
2,6-Dinitrotoluene	46.10		"	45.00		102	80-120			
3-Nitroaniline	42.01		"	42.00		100	80-120			
Acenaphthene	40.85		"	42.00		97.3	80-120			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15L0105 - 1K53018										
Calibration Check (15L0105-CCV1)				Prepared & Analyzed: 11/30/05						
2,4-Dinitrophenol	43.02		mg/kg wet	45.00		95.6	80-120			
Dibenzofuran	44.07		"	45.00		97.9	80-120			
2,4-Dinitrotoluene	45.17		"	45.00		100	80-120			
4-Nitrophenol	44.48		"	45.00		98.8	80-120			
Diethyl Phthalate	51.11		"	45.00		114	80-120			
Fluorene	42.62		"	42.00		101	80-120			
4-Chlorophenyl Phenyl Ether	51.68		"	45.00		115	80-120			
4-Nitroaniline	34.42		"	42.00		82.0	80-120			
4,6-Dinitro-2-methylphenol	43.33		"	45.00		96.3	80-120			
N-Nitrosodiphenylamine	40.31		"	45.00		89.6	80-120			
Azobenzene	38.55		"	42.00		91.8	80-120			
4-Bromophenyl Phenyl Ether	53.58		"	45.00		119	80-120			
Hexachlorobenzene	59.79		"	45.00		133	80-120			QS-02
Pentachlorophenol	57.01		"	45.00		127	80-120			QS-02
Phenanthrene	41.37		"	42.00		98.5	80-120			
Anthracene	39.42		"	42.00		93.9	80-120			
Di-n-butyl Phthalate	42.40		"	45.00		94.2	80-120			
Fluoranthene	45.69		"	42.00		109	80-120			
Benzidine	75.33		"	90.00		83.7	80-120			
Pyrene	35.68		"	42.00		85.0	80-120			
Butyl Benzyl Phthalate	35.94		"	45.00		79.9	80-120			QR-05
Benzo(a)anthracene	39.09		"	42.00		93.1	80-120			
Chrysene	35.51		"	42.00		84.5	80-120			
Bis(2-Ethylhexyl) Phthalate	35.15		"	45.00		78.1	80-120			QR-05
Di-n-octyl Phthalate	34.54		"	45.00		76.8	80-120			QR-06
Indeno(1,2,3-cd)Pyrene	47.52		"	42.00		113	80-120			
3,3'-Dichlorobenzidine	75.51		"	90.00		83.9	80-120			
Benzo(b)Fluoranthene	38.13		"	42.00		90.8	80-120			
Benzo(k)Fluoranthene	41.36		"	42.00		98.5	80-120			
Benzo(a)Pyrene	40.76		"	42.00		97.0	80-120			
Dibenzo(a,h)anthracene	47.41		"	42.00		113	80-120			
Benzo(g,h,i)perylene	48.36		"	42.00		115	80-120			
Surrogate: 2-Fluorophenol	*35.42*		*"*	*42.10*		*84.1*	*50-129*			
Surrogate: Phenol-d6	*40.35*		*"*	*42.40*		*95.2*	*50-132*			
Surrogate: Nitrobenzene-d5	*42.10*		*"*	*41.20*		*102*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*41.38*		*"*	*41.70*		*99.2*	*50-112*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15L0105 - 1K53018										
Calibration Check (15L0105-CCV1)			Prepared & Analyzed: 11/30/05							
Surrogate: 2,4,6-Tribromophenol	*66.13*		*mg/kg wet*	*41.80*		*158*	*54-140*			*S-07*
Surrogate: Terphenyl-dl4	*41.80*		*"*	*41.30*		*101*	*50-124*			
Batch 1K53018 - 3545 BNA PFE										
Blank (1K53018-BLK1)			Prepared & Analyzed: 11/30/05							
N-Nitrosodimethylamine	ND	0.33	mg/kg wet							
Phenol	ND	0.33	"							
Aniline	ND	0.33	"							
Bis(2-Chloroethyl) Ether	ND	0.33	"							
2-Chlorophenol	ND	0.33	"							
1,3-Dichlorobenzene	ND	0.33	"							
1,4-Dichlorobenzene	ND	0.33	"							
Benzyl Alcohol	ND	0.33	"							
1,2-Dichlorobenzene	ND	0.33	"							
2-Methylphenol	ND	0.33	"							
Bis(2-Chloroisopropyl) Ether	ND	0.33	"							
n-Nitroso-di-n-propylamine	ND	0.33	"							
(3 & 4)-Methylphenol	ND	0.33	"							
Hexachloroethane	ND	0.33	"							
Nitrobenzene	ND	0.33	"							
Isophorone	ND	0.33	"							
2-Nitrophenol	ND	0.33	"							
2,4-Dimethylphenol	ND	0.33	"							
Bis(2-Chloroethoxy) Methane	ND	0.33	"							
2,4-Dichlorophenol	ND	0.33	"							
1,2,4-Trichlorobenzene	ND	0.33	"							
Naphthalene	ND	0.33	"							
4-Chloroaniline	ND	0.33	"							
Hexachlorobutadiene	ND	0.33	"							
4-Chloro-3-methylphenol	ND	0.33	"							
2-Methylnaphthalene	ND	0.33	"							
Hexachlorocyclopentadiene	ND	0.33	"							
2,4,6-Trichlorophenol	ND	0.33	"							
2,4,5-Trichlorophenol	ND	1.65	"							
2-Chloronaphthalene	ND	0.33	"							
2-Nitroaniline	ND	1.65	"							

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53018 - 3545 BNA PFE										
Blank (1K53018-BLK1)			Prepared & Analyzed: 11/30/05							
Dimethylphthalate	ND	0.33	mg/kg wet							
Acenaphthylene	ND	0.33	"							
2,6-Dinitrotoluene	ND	0.33	"							
3-Nitroaniline	ND	1.65	"							
Acenaphthene	ND	0.33	"							
2,4-Dinitrophenol	ND	1.65	"							
Dibenzofuran	ND	0.33	"							
2,4-Dinitrotoluene	ND	0.33	"							
4-Nitrophenol	ND	0.66	"							
Diethyl Phthalate	ND	0.33	"							
Fluorene	ND	0.33	"							
4-Chlorophenyl Phenyl Ether	ND	0.33	"							
4-Nitroaniline	ND	0.66	"							
4,6-Dinitro-2-methylphenol	ND	1.65	"							
N-Nitrosodiphenylamine	ND	0.33	"							
Azobenzene	ND	0.33	"							
4-Bromophenyl Phenyl Ether	ND	0.33	"							
Hexachlorobenzene	ND	0.33	"							
Pentachlorophenol	ND	0.66	"							
Phenanthrene	ND	0.33	"							
Anthracene	ND	0.33	"							
Di-n-butyl Phthalate	ND	0.33	"							
Fluoranthene	ND	0.33	"							
Benzidine	ND	0.33	"							
Pyrene	ND	0.33	"							
Butyl Benzyl Phthalate	ND	0.33	"							
Benzo(a)anthracene	ND	0.33	"							
Chrysene	ND	0.33	"							
Bis(2-Ethylhexyl) Phthalate	ND	0.33	"							
Di-n-octyl Phthalate	ND	0.33	"							
Indeno(1,2,3-cd)Pyrene	ND	0.33	"							
3,3'-Dichlorobenzidine	ND	0.66	"							
Benzo(b)Fluoranthene	ND	0.33	"							
Benzo(k)Fluoranthene	ND	0.33	"							
Benzo(a)Pyrene	ND	0.33	"							
Dibenzo(a,h)anthracene	ND	0.33	"							

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53018 - 3545 BNA PFE										
Blank (1K53018-BLK1)				Prepared & Analyzed: 11/30/05						
Benzo(g,h,i)perylene	ND	0.33	mg/kg wet							
Surrogate: 2-Fluorophenol	*1.646*		"	*3.000*		*54.9*	*50-129*			
Surrogate: Phenol-d6	*2.938*		"	*3.050*		*96.3*	*50-132*			
Surrogate: Nitrobenzene-d5	*2.527*		"	*3.000*		*84.2*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*3.770*		"	*3.050*		*124*	*50-112*			*S-BN*
Surrogate: 2,4,6-Tribromophenol	*5.838*		"	*3.050*		*191*	*54-140*			*S-07*
Surrogate: Terphenyl-dl4	*2.958*		"	*3.017*		*98.0*	*50-124*			
LCS (1K53018-BS1)				Prepared: 11/30/05 Analyzed: 12/01/05						
Phenol	1.271	0.33	mg/kg wet	1.900		66.9	50-127			
2-Chlorophenol	1.759	0.33	"	2.073		84.9	50-110			
1,3-Dichlorobenzene	2.226	0.33	"	2.873		77.5	60-140			
1,4-Dichlorobenzene	2.269	0.33	"	2.357		96.3	50-110			
1,2-Dichlorobenzene	2.250	0.33	"	2.907		77.4	60-140			
2-Methylphenol	1.412	0.33	"	1.693		83.4	63-136			
n-Nitroso-di-n-propylamine	2.220	0.33	"	2.513		88.3	50-119			
(3 & 4)-Methylphenol	1.474	0.33	"	2.040		72.3	50-110			
Hexachloroethane	2.059	0.33	"	2.400		85.8	50-130			
Nitrobenzene	2.274	0.33	"	2.683		84.8	50-113			
2-Nitrophenol	1.423	0.33	"	1.867		76.2	50-125			
2,4-Dimethylphenol	1.814	0.33	"	2.027		89.5	60-140			
2,4-Dichlorophenol	1.903	0.33	"	2.260		84.2	60-140			
1,2,4-Trichlorobenzene	3.013	0.33	"	3.120		96.6	73-114			
Naphthalene	2.552	0.33	"	2.457		104	60-140			
Hexachlorobutadiene	3.165	0.33	"	2.783		114	60-140			
4-Chloro-3-methylphenol	1.747	0.33	"	1.980		88.2	58-122			
2,4,6-Trichlorophenol	2.660	0.33	"	2.787		95.4	79-125			
2,4,5-Trichlorophenol	1.906	1.65	"	2.000		95.3	60-140			
Dimethylphthalate	3.432	0.33	"	2.923		117	61-110			QS-01
Acenaphthylene	1.914	0.33	"	2.273		84.2	63-133			
2,6-Dinitrotoluene	2.282	0.33	"	2.437		93.6	50-121			
Acenaphthene	3.641	0.33	"	3.167		115	60-140			
2,4-Dinitrophenol	0.970	1.65	"	1.609		60.3	60-140			
2,4-Dinitrotoluene	2.944	0.33	"	2.570		115	60-140			
4-Nitrophenol	2.319	0.66	"	2.507		92.5	53-140			
Diethyl Phthalate	2.961	0.33	"	2.660		111	62-113			
Fluorene	2.494	0.33	"	2.357		106	50-138			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53018 - 3545 BNA PFE										
LCS (1K53018-BS1)				Prepared: 11/30/05 Analyzed: 12/01/05						
4,6-Dinitro-2-methylphenol	1.248	1.65	mg/kg wet	1.787		69.8	51-138			
Hexachlorobenzene	3.463	0.33	"	2.400		144	60-140			QS-01
Pentachlorophenol	2.223	0.66	"	2.153		103	58-139			
Phenanthrene	2.567	0.33	"	2.437		105	71-112			
Anthracene	2.418	0.33	"	2.313		105	50-110			
Di-n-butyl Phthalate	3.420	0.33	"	2.680		128	50-139			
Fluoranthene	5.306	0.33	"	5.067		105	57-118			
Pyrene	2.911	0.33	"	3.323		87.6	50-110			
Butyl Benzyl Phthalate	1.949	0.33	"	2.790		69.9	60-140			
Chrysene	1.872	0.33	"	2.727		68.6	50-137			
Bis(2-Ethylhexyl) Phthalate	2.263	0.33	"	2.923		77.4	60-140			
Benzo(b)Fluoranthene	3.260	0.33	"	2.423		135	60-140			
Benzo(k)Fluoranthene	3.322	0.33	"	2.323		143	60-140			QS-01
Benzo(a)Pyrene	3.066	0.33	"	2.457		125	50-137			
Surrogate: 2-Fluorophenol	*2.255*		"	*3.000*		*75.2*	*50-129*			
Surrogate: Phenol-d6	*2.822*		"	*3.050*		*92.5*	*50-132*			
Surrogate: Nitrobenzene-d5	*2.668*		"	*3.000*		*88.9*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*3.384*		"	*3.050*		*111*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*6.393*		"	*3.050*		*210*	*54-140*			*S-07*
Surrogate: Terphenyl-dl4	*2.845*		"	*3.017*		*94.3*	*50-124*			
Matrix Spike (1K53018-MS1)	**Source: 15K1139-06**			Prepared: 11/30/05 Analyzed: 12/01/05						
Phenol	1.552	0.33	mg/kg dry	2.384	ND	65.1	50-127			
2-Chlorophenol	1.990	0.33	"	2.601	ND	76.5	50-110			
1,3-Dichlorobenzene	1.930	0.33	"	3.605	ND	53.5	60-140			QM-07
1,4-Dichlorobenzene	1.927	0.33	"	2.957	ND	65.2	50-121			
1,2-Dichlorobenzene	2.056	0.33	"	3.647	ND	56.4	60-140			QM-07
2-Methylphenol	1.354	0.33	"	2.125	ND	63.7	63-136			
n-Nitroso-di-n-propylamine	2.002	0.33	"	3.153	ND	63.5	50-139			
(3 & 4)-Methylphenol	1.368	0.33	"	2.560	ND	53.4	50-110			
Hexachloroethane	1.681	0.33	"	3.011	ND	55.8	50-130			
Nitrobenzene	2.102	0.33	"	3.367	ND	62.4	50-132			
2-Nitrophenol	1.429	0.33	"	2.342	ND	61.0	50-125			
2,4-Dimethylphenol	0.820	0.33	"	2.543	ND	32.2	60-140			QM-07
2,4-Dichlorophenol	1.489	0.33	"	2.836	ND	52.5	60-140			QM-07
1,2,4-Trichlorobenzene	2.860	0.33	"	3.915	ND	73.1	54-115			
Naphthalene	2.233	0.33	"	3.082	ND	72.5	60-140			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53018 - 3545 BNA PFE										
Matrix Spike (1K53018-MS1)	**Source: 15K1139-06**			Prepared: 11/30/05		Analyzed: 12/01/05				
Hexachlorobutadiene	2.518	0.33	mg/kg dry	3.492	ND	72.1	60-140			
4-Chloro-3-methylphenol	1.591	0.33	"	2.484	ND	64.0	58-122			
2,4,6-Trichlorophenol	2.284	0.33	"	3.496	ND	65.3	76-131			QM-07
2,4,5-Trichlorophenol	1.472	1.65	"	2.509	ND	58.7	60-140			QM-07
Dimethylphthalate	2.721	0.33	"	3.668	ND	74.2	63-128			
Acenaphthylene	1.759	0.33	"	2.852	ND	61.7	63-133			QM-07
2,6-Dinitrotoluene	2.251	0.33	"	3.057	ND	73.6	59-117			
Acenaphthene	3.203	0.33	"	3.973	ND	80.6	60-140			
2,4-Dinitrophenol	1.795	1.65	"	2.019	ND	88.9	60-140			
2,4-Dinitrotoluene	3.131	0.33	"	3.225	ND	97.1	60-140			
4-Nitrophenol	3.009	0.66	"	3.145	ND	95.7	53-140			
Diethyl Phthalate	2.587	0.33	"	3.338	ND	77.5	54-140			
Fluorene	2.668	0.33	"	2.957	ND	90.2	50-124			
4,6-Dinitro-2-methylphenol	1.918	1.65	"	2.242	ND	85.5	51-138			
Hexachlorobenzene	3.403	0.33	"	3.011	ND	113	60-140			
Pentachlorophenol	2.222	0.66	"	2.702	ND	82.2	58-139			
Phenanthrene	2.591	0.33	"	3.057	ND	84.8	65-138			
Anthracene	2.304	0.33	"	2.903	ND	79.4	50-136			
Di-n-butyl Phthalate	2.555	0.33	"	3.363	ND	76.0	50-139			
Fluoranthene	5.431	0.33	"	6.357	ND	85.4	50-118			
Pyrene	2.745	0.33	"	4.170	ND	65.8	50-124			
Butyl Benzyl Phthalate	1.950	0.33	"	3.501	ND	55.7	60-140			QM-07
Chrysene	1.709	0.33	"	3.421	ND	50.0	50-137			
Bis(2-Ethylhexyl) Phthalate	2.180	0.33	"	3.668	ND	59.4	60-140			QM-07
Benzo(b)Fluoranthene	2.539	0.33	"	3.041	ND	83.5	60-140			
Benzo(k)Fluoranthene	1.923	0.33	"	2.915	ND	66.0	60-140			
Benzo(a)Pyrene	2.128	0.33	"	3.082	ND	69.0	50-137			
Surrogate: 2-Fluorophenol	*2.218*		"	*3.764*		*58.9*	*50-129*			
Surrogate: Phenol-d6	*3.448*		"	*3.827*		*90.1*	*50-132*			
Surrogate: Nitrobenzene-d5	*2.884*		"	*3.764*		*76.6*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*3.780*		"	*3.827*		*98.8*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*6.620*		"	*3.827*		*173*	*54-140*			*S-07*
Surrogate: Terphenyl-dl4	*3.383*		"	*3.785*		*89.4*	*50-124*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53018 - 3545 BNA PFE										
Matrix Spike Dup (1K53018-MSD1)	**Source: 15K1139-06**			Prepared: 11/30/05 Analyzed: 12/01/05						
Phenol	1.587	0.33	mg/kg dry	2.382	ND	66.6	50-127	2.23	20	
2-Chlorophenol	2.014	0.33	"	2.599	ND	77.5	50-110	1.20	24	
1,3-Dichlorobenzene	2.074	0.33	"	3.602	ND	57.6	60-140	7.19	40	QM-07
1,4-Dichlorobenzene	1.999	0.33	"	2.954	ND	67.7	50-121	3.67	16	
1,2-Dichlorobenzene	2.209	0.33	"	3.643	ND	60.6	60-140	7.17	40	
2-Methylphenol	1.299	0.33	"	2.123	ND	61.2	63-136	4.15	22	QM-07
n-Nitroso-di-n-propylamine	2.406	0.33	"	3.150	ND	76.4	50-139	18.3	17	QM-07
(3 & 4)-Methylphenol	1.596	0.33	"	2.557	ND	62.4	50-110	15.4	29	
Hexachloroethane	1.723	0.33	"	3.008	ND	57.3	50-130	2.47	20	
Nitrobenzene	2.140	0.33	"	3.363	ND	63.6	50-132	1.79	19	
2-Nitrophenol	1.429	0.33	"	2.340	ND	61.1	50-125	0.00	24	
2,4-Dimethylphenol	0.654	0.33	"	2.540	ND	25.7	60-140	22.5	40	QM-07
2,4-Dichlorophenol	1.727	0.33	"	2.833	ND	61.0	60-140	14.8	40	
1,2,4-Trichlorobenzene	2.864	0.33	"	3.911	ND	73.2	54-115	0.140	20	
Naphthalene	2.501	0.33	"	3.079	ND	81.2	60-140	11.3	40	
Hexachlorobutadiene	2.605	0.33	"	3.489	ND	74.7	60-140	3.40	40	
4-Chloro-3-methylphenol	1.624	0.33	"	2.482	ND	65.4	58-122	2.05	24	
2,4,6-Trichlorophenol	2.465	0.33	"	3.493	ND	70.6	76-131	7.62	15	QM-07
2,4,5-Trichlorophenol	1.729	1.65	"	2.507	ND	69.0	60-140	16.1	40	
Dimethylphthalate	2.788	0.33	"	3.664	ND	76.1	63-128	2.43	24	
Acenaphthylene	1.792	0.33	"	2.850	ND	62.9	63-133	1.86	26	QM-07
2,6-Dinitrotoluene	2.272	0.33	"	3.054	ND	74.4	59-117	0.929	28	
Acenaphthene	3.007	0.33	"	3.969	ND	75.8	60-140	6.31	10.1	
2,4-Dinitrophenol	1.795	1.65	"	2.017	ND	89.0	60-140	0.00	40	
2,4-Dinitrotoluene	3.003	0.33	"	3.221	ND	93.2	60-140	4.17	40	
4-Nitrophenol	3.267	0.66	"	3.142	ND	104	53-140	8.22	20	
Diethyl Phthalate	2.664	0.33	"	3.334	ND	79.9	54-140	2.93	28	
Fluorene	2.434	0.33	"	2.954	ND	82.4	50-124	9.17	30	
4,6-Dinitro-2-methylphenol	2.030	1.65	"	2.240	ND	90.6	51-138	5.67	22	
Hexachlorobenzene	3.194	0.33	"	3.008	ND	106	60-140	6.34	40	
Pentachlorophenol	2.441	0.66	"	2.699	ND	90.4	58-139	9.39	30	
Phenanthrene	2.407	0.33	"	3.054	ND	78.8	65-138	7.36	22	
Anthracene	2.230	0.33	"	2.900	ND	76.9	50-136	3.26	30	
Di-n-butyl Phthalate	2.402	0.33	"	3.359	ND	71.5	50-139	6.17	22	
Fluoranthene	5.197	0.33	"	6.351	ND	81.8	50-118	4.40	24	
Pyrene	2.737	0.33	"	4.166	ND	65.7	50-124	0.292	30	

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53018 - 3545 BNA PFE										
Matrix Spike Dup (1K53018-MSD1)	**Source: 15K1139-06**			Prepared: 11/30/05 Analyzed: 12/01/05						
Butyl Benzyl Phthalate	1.896	0.33	mg/kg dry	3.497	ND	54.2	60-140	2.81	40	QM-07
Chrysene	1.900	0.33	"	3.418	ND	55.6	50-137	10.6	30	
Bis(2-Ethylhexyl) Phthalate	2.155	0.33	"	3.664	ND	58.8	60-140	1.15	40	QM-07
Benzo(b)Fluoranthene	2.356	0.33	"	3.038	ND	77.6	60-140	7.48	40	
Benzo(k)Fluoranthene	1.835	0.33	"	2.912	ND	63.0	60-140	4.68	40	
Benzo(a)Pyrene	1.948	0.33	"	3.079	ND	63.3	50-137	8.83	30	
Surrogate: 2-Fluorophenol	*1.889*		*"*	*3.760*		*50.2*	*50-129*			
Surrogate: Phenol-d6	*3.278*		*"*	*3.823*		*85.7*	*50-132*			
Surrogate: Nitrobenzene-d5	*3.132*		*"*	*3.760*		*83.3*	*50-110*			
Surrogate: 2-Fluorobiphenyl	*3.960*		*"*	*3.823*		*104*	*50-112*			
Surrogate: 2,4,6-Tribromophenol	*6.144*		*"*	*3.823*		*161*	*54-140*			*S-07*
Surrogate: Terphenyl-dl4	*3.648*		*"*	*3.781*		*96.5*	*50-124*			
Reference (1K53018-SRM1)				Prepared: 11/30/05 Analyzed: 12/01/05						
Phenol	1.767	0.33	mg/kg wet	1.900		93.0	70-130			
2-Chlorophenol	2.477	0.33	"	2.073		119	70-130			
1,3-Dichlorobenzene	2.638	0.33	"	2.873		91.8	70-130			
1,4-Dichlorobenzene	2.235	0.33	"	2.357		94.8	70-130			
1,2-Dichlorobenzene	4.942	0.33	"	2.907		170	70-130			QR-05
2-Methylphenol	1.979	0.33	"	1.693		117	70-130			
n-Nitroso-di-n-propylamine	3.599	0.33	"	2.513		143	70-130			QS-02
(3 & 4)-Methylphenol	1.779	0.33	"	2.040		87.2	70-130			
Hexachloroethane	2.653	0.33	"	2.400		111	70-130			
Nitrobenzene	3.408	0.33	"	2.683		127	70-130			
2-Nitrophenol	1.783	0.33	"	1.867		95.5	70-130			
2,4-Dimethylphenol	2.446	0.33	"	2.027		121	70-130			
2,4-Dichlorophenol	2.959	0.33	"	2.260		131	70-130			QS-02
1,2,4-Trichlorobenzene	4.092	0.33	"	3.120		131	70-130			QR-05
Naphthalene	2.644	0.33	"	2.457		108	70-130			
Hexachlorobutadiene	3.862	0.33	"	2.783		139	70-130			QR-05
4-Chloro-3-methylphenol	2.138	0.33	"	1.980		108	70-130			
2,4,6-Trichlorophenol	3.095	0.33	"	2.787		111	70-130			
2,4,5-Trichlorophenol	2.186	1.65	"	2.000		109	70-130			
Dimethylphthalate	3.249	0.33	"	2.923		111	70-130			
Acenaphthylene	2.002	0.33	"	2.273		88.1	70-130			
2,6-Dinitrotoluene	2.716	0.33	"	2.437		111	70-130			
Acenaphthene	3.694	0.33	"	3.167		117	70-130			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Base/Neutral/Acid Extractable Compounds - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K53018 - 3545 BNA PFE										
Reference (1K53018-SRM1)				Prepared: 11/30/05 Analyzed: 12/01/05						
2,4-Dinitrophenol	2.157	1.65	mg/kg wet	1.610		134	70-130			QR-05
2,4-Dinitrotoluene	3.469	0.33	"	2.570		135	70-130			QR-05
4-Nitrophenol	2.812	0.66	"	2.507		112	70-130			
Diethyl Phthalate	3.179	0.33	"	2.660		120	70-130			
Fluorene	2.796	0.33	"	2.357		119	70-130			
4,6-Dinitro-2-methylphenol	2.031	1.65	"	1.787		114	70-130			
Hexachlorobenzene	3.533	0.33	"	2.400		147	70-130			QR-05
Pentachlorophenol	3.043	0.66	"	2.153		141	70-130			QR-05
Phenanthrene	2.720	0.33	"	2.437		112	70-130			
Anthracene	2.457	0.33	"	2.313		106	70-130			
Di-n-butyl Phthalate	2.574	0.33	"	2.680		96.0	70-130			
Fluoranthene	5.101	0.33	"	5.067		101	70-130			
Pyrene	2.764	0.33	"	3.323		83.2	70-130			
Butyl Benzyl Phthalate	2.294	0.33	"	2.790		82.2	70-130			
Chrysene	2.086	0.33	"	2.727		76.5	70-130			
Bis(2-Ethylhexyl) Phthalate	2.590	0.33	"	2.923		88.6	70-130			
Benzo(b)Fluoranthene	2.635	0.33	"	2.423		109	70-130			
Benzo(k)Fluoranthene	2.735	0.33	"	2.323		118	70-130			
Benzo(a)Pyrene	2.485	0.33	"	2.457		101	70-130			
Surrogate: 2-Fluorophenol	*3.965*		"	*3.000*		*132*	*70-130*			*S-07*
Surrogate: Phenol-d6	*4.683*		"	*3.050*		*154*	*70-130*			*S-07*
Surrogate: Nitrobenzene-d5	*3.489*		"	*3.000*		*116*	*70-130*			
Surrogate: 2-Fluorobiphenyl	*3.172*		"	*3.050*		*104*	*70-130*			
Surrogate: 2,4,6-Tribromophenol	*6.394*		"	*3.050*		*210*	*70-130*			*S-07*
Surrogate: Terphenyl-dl4	*3.402*		"	*3.017*		*113*	*70-130*			

Keystone Laboratories, Inc. - Newton

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeffrey King, Ph.D., Laboratory Director

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Determination of Physical/Conventional Chemistry Parameters - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L50101 - Wet Chem Preparation										
Duplicate (1L50101-DUP1)		**Source: 15K1139-06**		Prepared & Analyzed: 11/30/05						
% Solids	79.2	0.1	%		79.7			0.629	20	

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

Montgomery Watson Harza-IA	Project: Jefferson Barracks ANG	
11153 Aurora Avenue	Project Number: DAHA-A0066-84322-OF	**Reported:**
Des Moines IA, 50322	Project Manager: Adam Newman	12/20/05 14:49

Notes and Definitions

S-BN	Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
S-07	The surrogate recovery for this sample is outside of established control limits.
S-07	The surrogate recovery for this sample is outside of established control limits.
QS-02	The spike recovery for this QC sample exceeded established acceptance limits. However, all samples were below the reporting and/or regulatory limit so the data is acceptable.
QS-01	The blank spike recovery was outside acceptance limits. Batch accepted based on acceptable MS/MSD/RPD results.
QR-06	The reference standard was outside of established control limits.
QR-05	The reference standard was outside of established control limits. The batch was accepted based on acceptable LCS, MS/MSD and RPD results.
QM-07	The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Phone 641-792-8451 | 600 East 17th Street South, Newton, IA 50208 | Fax 641-792-7989

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

☒ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

☐ 3012 Ansborough Ave.
Waterloo, IA 50701
Phone: 319-235-4440
Fax: 319-235-2480
www.keystonelabs.com

☐ 1304 Adams
Kansas City, KS 66103
Phone: 913-321-7856
Fax: 913-321-7937

PRINT OR TYPE INFORMATION BELOW

SAMPLER: Adam R. Newman
SITE NAME: JBANGS - Site 2
ADDRESS: Kearney Street
CITY/ST/ZIP: St. Louis, MO
PHONE:

REPORT TO:
NAME: Adam Newman
COMPANY NAME: MWH Americas
ADDRESS: 11153 Aurora Avenue
CITY/ST/ZIP: Des Moines, IA 50322-7904
PHONE: 515-253-0830
FAX: 515-253-9592

BILL TO:
NAME: Adam Newman
COMPANY NAME: MWH Americas
ADDRESS: 11153 Aurora Avenue
CITY/ST/ZIP: Des Moines, IA 50322-7904
PHONE: 515-253-9592

Keystone Quote No.: Jefferson Barracks (If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED: SVOCs (8270C)	ANALYSES REQUIRED: TEH (Texas 1005)	LAB USE ONLY: SAMPLE CONDITION/COMMENTS	LAB USE ONLY: LABORATORY SAMPLE NUMBER
ExA-SW-North-9'	11-29-05	9:40	Excavation A	1	Soil		1	X		01
ExA-SW-East-9'	11-29-05	9:45	Excavation A	1	Soil		1	X		02
ExA-SW-West-9'	11-29-05	9:50	Excavation A	1	Soil		1	X		03
ExA-SW-South-9'	11-29-05	10:00	Excavation A	1	Soil		1	X		04
ExA-FL-12'	11-29-05	10:05	Excavation A	1	Soil		1	X		05
ExB1-SW-North-3'	11-29-05	10:55	Excavation B1	1	Soil		X			06
ExB1-SW-East-3'	11-29-05	10:45	Excavation B1	2	Soil		X			07
ExB1-SW-West-3'	11-29-05	10:40	Excavation B1	1	Soil		X			08
ExB1-SW-South-3'	11-29-05	11:00	Excavation B1	1	Soil		X			09
ExB1-FL-6'	11-29-05	10:50	Excavation B1	1	Soil		X			10

LABORATORY WORK ORDER NO.: 15K1139

SAMPLE TEMPERATURE UPON RECEIPT: °C

Relinquished by: (Signature)	Date 11/29/05	Received by: (Signature)	Date	Turn-Around: ☐ Standard	☒ Rush By 4PM 12/1/05 Contact Lab Prior to Submission
	Time 08:00		Time		
Relinquished by: (Signature)	Date	Received for Lab by: (Signature)	Date 11-30-05	Remarks:	
	Time		Time 8:05		

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

FORM: CCR 7-97

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

☒ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

☐ 3012 Ansborough Ave.
Waterloo, IA 50701
Phone: 319-235-4440
Fax: 319-235-2480
www.keystonelabs.com

☐ 1304 Adams
Kansas City, KS 66103
Phone: 913-321-7856
Fax: 913-321-7937

PRINT OR TYPE INFORMATION BELOW

SAMPLER: Adam R. Newman
SITE NAME: JBANGS - Site 2
ADDRESS: Kearney Street
CITY/ST/ZIP: St. Louis, MO
PHONE: ~~515~~

REPORT TO:
NAME: Adam Newman
COMPANY NAME: MWH Americas, Inc.
ADDRESS: 11153 Aurora Avenue
CITY/ST/ZIP: Des Moines, IA 50322-7904
PHONE: 515-253-0830
FAX: 515-253-9592

BILL TO:
NAME: Adam Newman
COMPANY NAME: MWH Americas, Inc
ADDRESS: 11153 Aurora Avenue
CITY/ST/ZIP: Des Moines, IA 50322-7904
PHONE: 515-253-0830

Keystone Quote No.: Jefferson Barracks (If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED: SVOCs (8270C)	ANALYSES REQUIRED: TEH (Texas 1005)	LAB USE ONLY: LABORATORY SAMPLE NUMBER
Ex B2-SW-North-3'	11-29-05	12:10	Excavation B2	1	Soil	G	X	1	11
Ex B2-SW-East-3'	11-29-05	12:45	Excavation B2	1	Soil	G	X	1	12
Ex B2-SW-West-3'	11-29-05	12:55	Excavation B2	1	Soil	G	X	1	13
Ex B2-SW-South-3'	11-29-05	12:35	Excavation B2	1	Soil	G	X	1	14
Ex B2-FL-6'	11-29-05	12:50	Excavation B2	1	Soil	G	X	1	15
Dup 1	11-29-05	—	Duplicate	1	Soil	G	1	X	16
Dup 2	11-29-05	—	Duplicate	1	Soil	G	X	1	17
			ADW						

LABORATORY WORK ORDER NO.: 15K1139
SAMPLE TEMPERATURE UPON RECEIPT: °C
SAMPLE CONDITION/COMMENTS:

Relinquished by: (Signature)	Date 11-29-05	Received by: (Signature)	Date	Turn-Around: ☐ Standard ☒ Rush By 4PM 12/1/05 (Contact Lab Prior to Submission)	
	Time 08:05		Time		
Relinquished by: (Signature)	Date	Received for Lab by: (Signature)	Date 11-30-05	Remarks:	
	Time		Time 8:05		

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

FORM: CCR 7-97

APPENDIX C

APPENDIX C

PHOTOGRAPHIC RECORDS

PHOTOGRAPHIC RECORD

Photo No.: 1

Photographer:
Adam Newman - MWH

Date:
10-20-2005

Direction:
North-Northeast

Description:
Boring location SB-9 near proposed Excavation A prior to removal action.

Photo No.: 2

Photographer:
Adam Newman - MWH

Date:
10-20-2005

Direction:
East-Southeast

Description:
Boring locations SB-10 to SB-16 at proposed Excavation B prior to removal action.

MWH

Missouri Air National Guard
ERP Site No. 2, 157th Air Operations Group
Jefferson Barracks Air National Guard Station
St. Louis, Missouri
Project No.: 2090955

PHOTOGRAPHIC RECORD

Photo No.: 3

Photographer:
Adam Newman - MWH

Date:
11-29-2005

Direction:
North-Northeast

Description:
Excavation A.

Photo No.: 4

Photographer:
Adam Newman - MWH

Date:
11-29-2005

Direction:
East-Southeast

Description:
Excavation B1 showing exposed electrical conduits adjacent and parallel to underground water line (not shown).

MWH

Missouri Air National Guard
ERP Site No. 2, 157th Air Operations Group
Jefferson Barracks Air National Guard Station
St. Louis, Missouri
Project No.: 2090955

PHOTOGRAPHIC RECORD

Photo No.: 5

Photographer:
Adam Newman - MWH

Date:
12-2-2005

Direction:
East

Description:
Excavation B2.

Photo No.: 6

Photographer:
Adam Newman - MWH

Date:
12-2-2005

Direction:
West

Description:
ERP Site No. 2 upon completion of removal action activities.

MWH

Missouri Air National Guard
ERP Site No. 2, 157th Air Operations Group
Jefferson Barracks Air National Guard Station
St. Louis, Missouri
Project No.: 2090955

APPENDIX D

APPENDIX D

DRILLING LOGS

Drilling Log

MWH

Soil Boring **SB-10**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *8.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

COMMENTS
PID readings of screen samples escalated likely due to moisture.

Depth (ft)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
						Grass with gravel
0						Fill Material - SILT loam with sand and gravel, brown, coarse sand, large to small angular gravel, trace small brick fragments, no odor.
2	-					
		SB10 3-4'			CL ML	Silty CLAY, light brown, soft to stiff clay, moist at 8', no odor.
4	-					
6	-					
8	-					End of soil boring
10						
12						

DRILLING LOG BORING LOGS SB9 TO SB16.GPJ MWH IA.GDT 1/5/06

Drilling Log

MWH

Soil Boring **SB-11**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *8.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

COMMENTS
PID readings of screen samples escalated likely due to moisture.

Depth (ft)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
						Grass with gravel
0						Fill Material - SILT loam with sand and gravel, brown, coarse sand, large to small angular gravel, trace small brick fragments, no odor.
2	-					Silty CLAY, light brown, soft to stiff clay, little moisture, moderate plasticity, no odor.
		SB11 3-4'				
4	-				CL ML	
6	-					
						CLAY, light brown, stiff, high plasticity, some moisture, no odor.
					CH	
8	-					End of soil boring.
10						
12						

DRILLING LOG BORING LOGS SB9 TO SB16.GPJ MWH IA.GDT 1/5/06

Drilling Log

MWH

Soil Boring **SB-12**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *8.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

COMMENTS
PID readings of screen samples escalated likely due to moisture.

Depth (ft)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) — Geologic Descriptions are Based on the USCS.
						Grass with gravel
0	-	SB12 3-4'			CL	CLAY with sand and gravel, brown, coarse sand, large to small angular gravel, trace small coal fragments, dry, no odor.
2						
4	-				CL ML	Silty CLAY, light brown, soft to stiff clay, little moisture, moderate plasticity, no odor.
6	-					
8	-					End of soil boring.
10						
12						

Drilling Log

MWH

Soil Boring **SB-13**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *8.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

COMMENTS
PID readings of screen samples escalated likely due to moisture.

Depth (ft)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) — Geologic Descriptions are Based on the USCS.
						Grass with gravel
0	-	SB13 3-4'			CL ML	Fill Material - CLAY loam, brown, coarse sand, large to small angular gravel, small roots, dry, no odor.
2						Silty CLAY, light brown to brown, low plasticity, trace coarse sand and small angular gravel, dry, no odor.
4	-					
6	-				CL ML	Silty CLAY, light brown, soft to stiff clay, little moisture, moderate plasticity, no odor.
8	-					End of soil boring.
10						
12						

DRILLING LOG BORING LOGS SB9 TO SB16.GPJ MWH IA.GDT 1/5/06

Drilling Log

MWH

Soil Boring **SB-14**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *8.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

COMMENTS

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
						Grass with gravel
0						Fill Material - SILT loam with coarse sand and large to small angular gravel, no odor.
2	0.0					
		SB14 3-4'			CL ML	Silty CLAY, light brown, soft, low plasticity, some silty red mottling, dry, no odor.
4	0.0					
						CLAY, light brown, soft to stiff, moderate plasticity, little moisture, no odor.
6	0.0				CL	
8	0.0					End of soil boring.
10						
12						

Drilling Log

MWH

Soil Boring **SB-15**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *8.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

COMMENTS

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
						Grass with gravel
0						FIll Material - Clayey SILT with sand and gravel, brown, large to small angular gravel, coarse sand, trace small brick fragments at 2.2', no odor.
2	0.0					
		SB15 3-4'				SIlty CLAY with gravel; light brown; reddish silty mottling, large angular gravel at 3.5', 5' and 6'; trace small coal fragments; low to moderate plasticity, low moisture; no odor.
4	0.0				CL ML	
6	0.0					
					CL	SIlty CLAY, light brown, moderate plasticity, moist, no odor.
8	0.0					End of soil boring.
10						
12						

DRILLING LOG BORING LOGS SB9 TO SB16.GPJ MWH IA.GDT 1/5/06

Drilling Log

MWH

Soil Boring **SB-16**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *8.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

COMMENTS

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) — Geologic Descriptions are Based on the USCS.
						Grass with gravel
0						FIll Material - Clayey SILT with sand and gravel, light brown, coarse sand, large to small angular gravel, trace small brick and coal fragments, dry, no odor.
2	0.0					Silty CLAY, light brown, stiff, some small roots, low to moderate plasticity, little moisture, no odor.
		SB16 3-4'				
4	0.0				CL ML	
6	0.0					
8	0.0					End of soil boring.
10						
12						

DRILLING LOG BORING LOGS SB9 TO SB16.GPJ MWH IA.GDT 1/5/06

Drilling Log

MWH

Soil Boring **SB-9**

Project *ERP Site No. 2 RA* Owner *Missouri Air National Guard*

Location *Jefferson Barracks Air National Guard Station* Project Number *2090955*

Surface Elev. *NA* Hole Depth *12.0 ft* Hole Diameter *2.0 in* North *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA* East *NA*

Screen: Diameter *NA* Length *NA* Type/Size *NA*

Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *Below Ground Surface* Drilling Method *Direct-Push*

Driller *Mike Oscody* Drillers License Number *03238PM* Log By *ARN* Checked By *JLC*

Start Date *10/20/05* Completion Date *10/20/05* Well Permit # *NA*

Bentonite Chips | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

COMMENTS
PID readings of screen samples escalated likely due to moisture.

Depth (ft)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
						Grass with gravel
0						Fill Material - large angular GRAVEL with coarse to fine sand and silt, light brown, no odor.
2	3				CL ML	Silty CLAY with sand, dark brown, coarse sand, trace small brick fragments, soft clay with low plasticity, little moisture, no odor.
						Silty CLAY, light brown, little coarse sand, trace small brick fragments, soft clay with low plasticity, little moisture, no odor.
4	6				CL ML	
6	-				CL ML	Silty CLAY with gravel, dark brown, small angular gravel, soft clay with low plasticity, little moisture, no odor.
		SB9 6-8'			CL	CLAY, light brown-light grey, soft clay, trace fine sand, moderate plasticity, no odor.
8	-					Sandy Clay to Clayey SAND, light brown, soft clay, moist, no odor.
10	-				SC	
12	-					End of soil boring.

DRILLING LOG BORING LOGS SB9 TO SB16.GPJ MWH IA.GDT 1/5/06

APPENDIX E

APPENDIX E

DATA VALIDATION REPORTS

DATA VALIDATION REPORT
Missouri Air National Guard
Jefferson Barracks ERP Site #2
October and November 2005

Nineteen soil and associated quality control (QC) samples were collected from the Missouri Air National Guard (MOANG) Base, Jefferson Barracks ERP Site #2, Jefferson Barracks, Missouri in October and November 2005. The samples were analyzed by Keystone Laboratories, Inc., Newton, Iowa for one or more of the following: semi-volatile organic compounds (SVOCs) by United States Environmental Protection Agency (USEPA) Method SW-846 8270C and total extractable hydrocarbons (TEH) by Iowa Method OA2/S-8015. The analytical data were reviewed based on the results of the data evaluation parameters and/or the QC sample results provided by the laboratory.

Sample Delivery Group (SDG) 15J0975

The matrix spike/matrix spike duplicate (MS/MSD) associated with the TEH analysis of sample Site 2-SB9 6-8' indicated a percent recovery outside the acceptance criteria with a low bias for #2 diesel fuel. Since this reflects a low bias, the associated sample was flagged "J" as estimated for this compound.

The continuing calibration verification (CCV) associated with the SVOC analysis of all samples indicated percent recoveries outside the acceptance criteria with low biases for 4-nitroaniline and 3,3'-dichlorobenzidine. Since these reflect low biases, the associated samples were flagged "J" as estimated for these compounds. This CCV also indicated percent recoveries outside the acceptance criteria with high biases for for n-nitrosodimethylamine, butyl benzyl phthalate, and bis (2-ethylhexyl) phthalate. Since these reflect high biases, and the compounds were not detected in the samples, no flags were issued.

The laboratory control sample (LCS) associated with the SVOC analysis of all samples indicated percent recoveries outside the acceptance criteria with low biases for 1,4-dichlorobenzene; 1,2-dichlorobenzene; 2-methyphenol; hexachloroethane; 2,4-dinitrophenol; and chrysene. Since

these reflect low biases, the associated samples were flagged “J” as estimated for these compounds.

The MS/MSD associated with the SVOC analysis of sample Site 2-SB10 3-4’ indicated percent recoveries outside the acceptance criteria with low biases for 1,4-dichlorobenzene; 1,2-dichlorobenzene; 2,4-dimethylphenol; 2,4-dichlorophenol; 1,2,4-trichlorobenzene; hexachlorobutadiene; 2,4,5-trichlorophenol; 2,4-dinitrophenol; chrysene; and hexachloroethane. Since these reflect low biases, the associated sample was flagged “J” as estimated for these compounds.

Based on the results of this data validation, all data are considered complete and valid as qualified.

SDG 15K1139

The CCV associated with the SVOC analysis of all samples indicated percent recoveries outside the acceptance criteria with low biases for n-nitrosodimethylamine; (3 & 4) methylphenol; hexachlorocyclopentadiene; 2-nitroaniline; butyl benzyl phthalate; di-n-octyl phthalate; and bis (2-ethylhexyl) phthalate. Since these reflect low biases, the associated samples were flagged “J” as estimated for these compounds. This CCV also indicated percent recoveries outside the acceptance criteria with high biases for hexachlorobutadiene; hexachlorobenzene; and pentachlorophenol. Since these reflect high biases, and the compounds were not detected in the samples, no flags were issued.

The LCS associated with the SVOC analysis of all samples indicated percent recoveries outside the acceptance criteria with low biases for phenol; (3 & 4) methylphenol; 2,4-dinitrophenol; 4,6-dinitro-2-methylphenol; butyl benzyl phthalate; and chrysene. Since these reflect low biases, the associated samples were flagged “J” as estimated for these compounds. This LCS also indicated percent recoveries outside the acceptance criteria with high biases for hexachlorobenzene; di-n-butyl phthalate; benzo(b)fluoranthene; and benzo(k)fluoranthene. Since these reflect high biases, and the compounds were not detected in the samples, no flags were issued.

The MS/MSD associated with the SVOC analysis of sample ExB1-SW-North 3' indicated percent recoveries outside the acceptance criteria with low biases for various compounds. Since these reflect low biases, the associated sample was flagged "J" as estimated for these compounds.

Based on the results of this data validation, all data are considered complete and valid as qualified.